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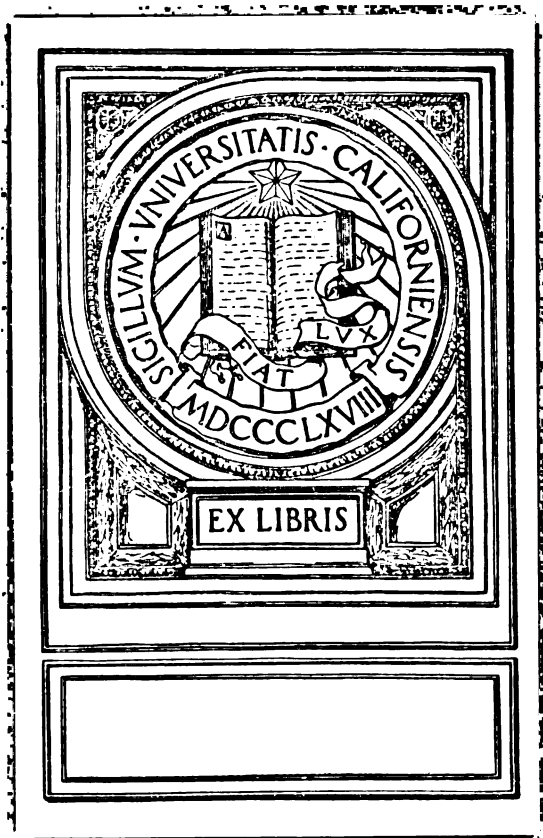
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SOCIALIZED GERMANY

·SOCIALIZED GERMANY·

BY

FREDERIC C. HOWE, LL.D.

"
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PREFACE

MUCH of the material for this book was ready for publication in the fall of 1914. It is the product of rather intimate knowledge of German life during the past quarter of a century. When the war broke out the manuscript was laid aside to await its termination, but as the contest wore on and the extraordinary resources of Germany were disclosed, it seemed to me the book should be published, partly as an explanation of the efficiency of Germany, but primarily as a suggestion of a new kind of social statesmanship which our own as well as other countries must take into consideration if they are to be prepared to meet the Germany which, in victory or defeat, emerges from the war. For the "German peril" is only in part a military peril. It is a peace peril as well. The real peril to the other powers of Western civilization lies in the fact that Germany is more intelligently organized than is the rest of the world. The individual German receives more from society. He is better protected in his daily life. The gains of civilization are more widely distributed than they are with us. His dignity and his per-

sonal liberty are on a different, and from our point of view on a lower, plane than in America and Great Britain, but his daily and his hourly needs, and those of his wife and family, are better cared for. And the individual man is more efficient. He is better prepared for his work. He enjoys a wholesome leisure life. He is assured protection from *la misère* in old age. The workhouse does not await him if he falls by the wayside.

It is my belief that Germany had just reached the beginning of her greatest achievements. Had not the war intervened, the next generation would have seen her competitors in industry, trade, and commerce outdistanced at an accelerated speed that would have soon left them far and possibly permanently in the rear.

If this is to be averted, new ideas of the obligations of the state must animate our legislators. There must be an abandonment of the old conception that the only business of organized society is to protect the individual from domestic and foreign aggression. There must be a wide extension of public ownership, a greater control of the aggressions of privilege and property, a big programme of social legislation, a change in our system of education, and the exclusion of privileged and business interests from the long ascendancy which they have enjoyed

in our political life. It required the war to make this clear to Great Britain. It should shake us from our complacency as well.

I desire to acknowledge the invaluable aid received in the preparation of this volume from the works of William Harbutt Dawson, whose books, "The Evolution of Modern Germany," "Industrial Germany," "Social Insurance in Germany," and "Municipal Life and Government in Germany," offer mines of information as well as a sympathetic interpretation of the constructive political and social statesmanship of that country.

I am also indebted to Miss Gertrude Borchard for valuable assistance and research in the collection of material and its preparation for publication.

FREDERIC C. HOWE.

NEW YORK, September, 1915.

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SOCIALIZED GERMANY

CHAPTER I

INTRODUCTORY—THE DUAL GERMANY

THIS is not an *apologia pro Germania*. It is not a defense of militarism nor a glorification of the Prussian idea of the state. Nor is it a plea for socialism, although the experience of Germany disproves many of the arguments against the possibility of a socialist state. I am one of those who still believe that with special privileges abolished and industrial freedom assured, society would realize an approach to economic justice that would exclude the necessity of socialism. And I believe in democracy, and all that democracy implies.

Germany has adopted a mixed programme, a programme of state socialism which insures a large degree of industrial freedom. It is not the socialism to which the Social Democratic party aspires; it does not involve control by the working classes. It is the socialism of the ruling caste, the great estate owners and the capitalists. And it is through state socialism that efficiency as well as a large measure of freedom has been secured.

With many other Americans I have an affection for the German people, for the orderliness, finish, and perfection of administration that makes for

2. SOCIALIZED GERMANY

personal comfort and convenience. I like the German cities, and have affectionate memories of Munich, Dresden, Düsseldorf, Frankfort, and Nuremberg, with their generous provision for art, drama, music, and the cultural things of life. I have a veneration for the traditions and glories of the principalities and free cities that existed for centuries as autonomous states prior to the organization of the empire. I have unbounded respect for the German educational system, for the universities, for the wonderful elementary, vocational, and high schools, as well as for the technical colleges for training in industrial arts, in commerce and administration. I admire the far-seeing legislation for the protection of the worker from the costs of industrial and urban life, the social measures promoted by Bismarck, and the many municipal services like town-planning, municipal ownership, and the other public activities that explain in large measure the charm of the German city.

The following chapters are an attempt to understand the conflict between these achievements and the things we do not like in Germany; they are an endeavor to explain the militarism and the humanity, the paternalism and the large degree of freedom which paternalism has secured to all classes. It is an attempt to understand Germany at work as well as at war; to portray the background which in large measure explains the military efficiency of the em-

pire. . And I have tried to write the book as though there were no war.

And the underlying fact about Germany is that the old Germany of a score of independent states has been submerged by the new Germany of Prussia. For Prussia is Germany, and Prussia in turn is feudal. The confusion we feel about Germany is traceable to the fact that much of the beauty and charm of old Germany has been crushed under the heel of the feudal autocratic caste which under constitutional forms has projected its ideas into the very life of the empire. It is a Germany that has lost much of the individuality, much of the freedom, and much of the liberalism of a century ago, for which has been substituted a commercial and landed feudalism having for its foundations the political and social concepts of an earlier age.

We may deplore the Prussianizing process but at the same time admit that there is much that is wonderful in the structure that has been erected during the past generation; a structure like that of ancient Rome in the institutions that have been created, and the big-visioned ideas of legislation, of education, and of social activities that have been given to the world. These ideas will only be ignored by those who will not see. And it will be an unfortunate thing for the nation that refuses to see. For once the war is over, the pace for industrial supremacy will be fierce and rapid. The race for recovery

will be to the strong and well-equipped. And there is no doubt but that Germany will turn from war to peace with much of the preparedness that she turned from peace to war. Her state-owned railways and waterways, her mines and mineral resources, her shipping and other commercial agencies, with the highly trained men at her command, will respond to an electric button when the treaties of peace are agreed upon, and her mills, factories, and workshops, her financial resources and credit agencies, will respond to the imperial will just as did the armies which were set in motion by the mobilization orders in the summer of 1914. I have no doubt but that to-day, in the midst of encircling wars, Germany is making ready for peace, and the problems then to be met, just as for a quarter of a century she has been preparing for war. And just as France and England found themselves unprepared on the battle line, so they, and possibly America, will find themselves equally unprepared for the new struggle when the war is over.

And whatever we may think of German militarism, of German autocracy, of German *Kultur*, the fact remains that Germany has developed wonderful efficiency, not only in the production of wealth, but in the distribution of the advantages of civilization as well. There is efficiency in transportation, scientific thought to every process and every social and industrial problem; there is the greatest concern for

human life, for health and well-being, for the education and training of workers, artists, commercial men, and scientists, and the co-ordination of the individual into a machine of national rather than purely personal dimensions. All Germany, in fact, acts as a unit. The individualism of England and America does not there exist. There is an official realization that the division of labor is no longer confined to a single establishment; it is nation-wide in its scope. Along with this is the conviction that many things must be done by the state to insure a free field for industry; to guarantee to every man a fair chance to realize upon his abilities and his powers.

All of this is of especial significance to America at the present time. Our public domain is gone. A great part is held out of use. Opportunities in the West are closed forever. Our unbounded resources have been appropriated. Monopoly has closed many industries to effective competition. The means of transportation are in private hands. Financial credit is still largely a matter of personal favor. And credit is still monopolized, as are the raw materials of production. Unemployment is chronic. It is likely to increase rather than diminish, for the opportunities for labor are under the control of the few. The city, the state, and the nation are still largely police agencies rather than agencies of service.

Public officials are still animated by the individual-

istic *laissez-faire* philosophy of an earlier generation, and as a consequence the public service is negative in its ideals, while the men who are attracted to it are untrained to constructive effort. Of skilled administrators with social vision, there are comparatively few, while the universities and the schools offer but little training in this field. There is no big statecraft, no commanding idea of statesmanship, and only grudging social legislation. Instead we have the struggle of economic groups, each seeking to promote a programme of narrow class interest.

Many of these problems have been worked out by Germany in a thoroughgoing way. Administrative and industrial efficiency are a scientific study in which hundreds of thousands of the best minds of the state are engaged. The same is true of commerce and trade. The rest of the world is a quarter of a century behind Germany in social consciousness, in an understanding of the new statecraft, in appreciation of the necessity for social legislation, and for adjusting education in all of its branches to life.

Germany has given a new conception of the state to the world. It may not be a beautiful conception. It certainly violates our ideas of personal and political freedom. But at least the idea is a successful one. It is in harmony with modern industry, and finds its counterpart in the trusts, the syndicates, and the ideas of scientific production with which we

are familiar. Germany is a recrudescence of the Greek idea of the state adjusted to twentieth-century conditions. It is a state that thinks primarily in terms of the ruling class; but it thinks as well in terms of the whole population. Politically Germany is an oligarchy, but an oligarchy concerned about the well-being of the people, about their health, education, comfort, and efficiency. And viewed from this standpoint, Germany is a democratically minded country. It is a state organized on the ideals of Frederick the Great, but guided by the scientific ideas of the twentieth century. It is a feudal state with the view-point of benevolent paternalism. And the result of this policy has been efficiency, power, and a high average of well-being, coupled with administrative control of the lives, thoughts, and liberties of the people.

CHAPTER II

THE BACKGROUND OF MODERN GERMANY

WITH all of the books that have been written on the subject, Germany still mystifies us. She evades Anglo-Saxon analysis. She differs from other countries in the most unexpected ways and challenges most of our theories of politics. We find difficulty in understanding the psychology of the people, their attitude toward the war, the Kaiser, and the ruling classes. There are many other anomalies that the Anglo-Saxon, and especially the American mind, cannot explain. Governed by an almost feudal aristocracy with a detachment and disdain for all other classes, Germany has worked out the most elaborate programme of social legislation and state socialism of any country in the world. Admittedly a people with but little aptitude for politics in the common acceptation of the term, the states and cities have perfected their administration and carried government ownership beyond the programmes of any except the extreme socialists of other countries. Oppressed by the anti-socialist laws of Bismarck, there has grown up the most highly organized revolutionary type of socialism in Europe, with a total vote of over 4,000,000 electors. Up to

1870 almost exclusively an agricultural nation, Germany has developed her resources, diversified her industries, expanded her trade and commerce, and pushed herself to the front rank as an industrial power in the face of the almost complete occupation of the markets of the world by other countries.

These are but suggestive of the many political and social riddles which Germany presents. These are some of the anomalies which challenge the teachings of history and our currently accepted theories of politics.

What is the explanation of the German people? What lies back of the prowess of the nation not only in war but in the arts of peace as well? By what means has a peasant country been able to project its life into industry, commerce, and finance, and extend its conquests into every corner of the earth? How has an autocratic state, the most autocratic in western Europe, been induced to think in terms of the peasant and the artisan, and to provide social insurance and education, state socialism and protection for the weaker members of the state, far beyond any programme yet developed by any of the democratic nations of the world? What is the social psychology of the German people that apparently denies the materialistic interpretation of politics enunciated by socialists and largely confirmed by the contemporary experiences of other countries?

A people cannot be analyzed in a few paragraphs, and cannot be understood by an outsider even with the most sympathetic of intentions. It is difficult to understand one's own country—the changes in sentiment and conviction, the swift abandonment of one position tenaciously held for another. Even in America the political and social currents elude us. And the social psychology of Germany is particularly baffling. It has confused even the students, artists, and travellers who during the last generation have gone to Germany for an education, for cultural things, and the leisure life which Germany offers.

Possibly the most important influence in the making of modern Germany and in moulding the mind of the nation is the persistence even down to present times of the feudal idea of the state with its eighteenth-century relation of classes. The German people, especially the Prussians, still think in terms of an earlier age; they accept the divine right of kings and the only less divine right of the feudal aristocracy to rule. And they accept this with but little intellectual protest. Up to a generation ago there were but two classes in Germany: the feudal estate owners and the peasants working upon the soil, whose relations had not materially changed in centuries. The great feudal estates still persist in Prussia, and a quasi-feudal system is the economic mould of Germany. It is this that is responsible for caste, for the division into classes; it is this

that explains the social cleavage and the acceptance of authority. It is this, too, that explains the paternalism of Prussia, just as it is the wide distribution of the land under peasant proprietorship that explains the *gemütlichkeit* of South Germany.

Feudal conditions have projected the traditions of an earlier age down to the present day. They are responsible for the autocratic power of the King of Prussia, who remains a great landlord, the first among other great landlords. His possessions have been in the Hohenzollern family for centuries. The Mark of Brandenburg, extended by force of arms into the kingdom of Prussia and later under Bismarck into the empire, is an expansion of the feudal state. The constitution of 1871 is a legal crystallization of eighteenth-century conditions, as is the earlier constitution of Prussia. While suggesting parliamentary forms, in reality they but legalize, through the limitations upon the suffrage, the unjust distribution of seats and the ascendancy of the feudal class, the control of the old aristocracy in the life of the nation.

And this old feudal class is the ruling class. It fills all the higher offices of the state. From it come the chancellors and ministers of the empire. It officers the army and navy. It moulds public opinion and controls legislation. The feudal class is society. But this class is not Germany. It has little interest in or appreciation of the Germany

which many Americans know and love. And we cannot understand Germany without understanding this duality. The confusion we feel, the mental conflict of so many people, is traceable to the fact that there are two Germanys: the Germany of politics, militarism, and aggression, and the Germany of culture, sweetness, efficiency, and life. Official, feudal Germany is separate and apart from the real Germany. The voice of the class which rules is not the voice of the people. It does not represent the worker, the peasant, the merchant, or even the great majority of the property-owning classes.

It is this persistence of an earlier organization of society that explains the sense of dependence on the part of the people, and the respect and veneration for authority which affects all classes. No other nation has so completely subordinated the individual to the state; nowhere does such unchallenged authority attach to so large an official class; and nowhere does the official command such unquestioned obedience.

There are two explanations for this persistence of the mediæval idea of the state—an anachronism in the twentieth century. In the first place the French Revolution did not penetrate into Prussia as it did into Italy, Belgium, South Germany, and even Scandinavia. Prussia was sparsely settled. There were few cities, and the system of feudal landownership was too nearly universal for the revolutionary

forces to gain a footing. Nor did the later revolutionary movements of the nineteenth century penetrate into that part of Germany that lies to the east of Berlin, into East Prussia, Posen, and Pomerania. And when the constitution of Prussia was formed the liberal forces were too weak to make their influence felt. The constitution then adopted was merely a recasting in legal form of the old feudal order. There was no provision for direct universal suffrage or even an approach to it, for a responsible ministry, or for real constitutional forms. Later, when Prussia became the dominating state in Germany, she impressed her feudal will and control by the feudal classes upon the imperial constitution. Manhood suffrage, it is true, was provided in elections to the Reichstag, but this is only a semblance of popular power. The King became the Kaiser, and along with the Bundesrat, or Senate, the final repository of authority. There is no suggestion of popular control over the government, and popular opinion does not influence the ruling classes. Even in the Prussian cities the great majority of the people have but little voice. Politically Germany is but little changed from what it was a century ago, and the explanation is to be found in the fact that the traditions of the people and the constitution of the state repose the government in the hands of the great landowners, who remain almost as powerful as they were in an earlier age.

A second explanation of the persistence of the feudal state and the eighteenth-century relation of classes is found in the fact that the industrial revolution did not reach Germany until very recently. The factory system with a large industrial urban population dates back to the Franco-Prussian War. It was almost a century old in Great Britain before it appeared in Germany. In the former country it had built great cities and created a powerful financial class, which insisted on political and social recognition, and through its influence on legislation and public opinion it put an end to much of the personal and political subjection of earlier times. The new commercial aristocracy broadened the suffrage as early as 1832. It abolished the rotten-borough system, which still prevails in Prussia. It repealed all limitations on admission to the Commons, and in 1910 it took away the veto from the House of Lords. Freedom of conscience, of speech, and of the press were guaranteed, and these are of the very essence of popular government. The ministry was made responsible, not to the King, but to Parliament and the party in power. Far more important, the commercial classes became rich and powerful a generation before they appeared in Prussia. The members entered Parliament. They married into the old aristocracy. And, one by one, they took away the privileges of the old feudal class.

Through the growth of industry England became

predominantly an industrial and trading nation, until to-day four-fifths of her people live in cities. And through manhood suffrage industry became articulate in legislation. It broke down the old feudal concepts of the state and changed the psychology of Great Britain. A new aristocracy was elevated alongside of the old landed aristocracy, and in securing political equality for itself it secured equality for the rest of the people as well.

In Germany, on the other hand, the old régime was crystallized into constitutional form long before the commercial classes had risen to prominence in the empire. The commercial aristocracy is of recent appearance; it has never been admitted to the old aristocracy, and under the constitutions of Prussia and the empire it has but little voice in the affairs of the nation.

The second influence in the moulding of modern Germany is the complete ascendancy of two powerful individuals who have dominated the life of the nation for over fifty years. These individuals are Prince Bismarck and William II. And these two men were consistent in their ambitions and alike in their traditions. They had the same vision of the paternal state. And both reflected the ideals of an earlier age. Bismarck came from the ruling classes, the aristocracy. He loved Prussia and his King. And he loved only less the Junker class from which he came. He was trained to statecraft, and just as

Stein and Hardenberg were entrusted with power following the humiliation of Prussia by Napoleon, so Bismarck was given almost sovereign authority by William I in the years prior to the Franco-Prussian War, as well as in the period of construction which followed it, when the results of military conquest and the French milliards were made the basis of a political, industrial, and social programme that has been carried on since Bismarck's retirement by Emperor William II.

These two men have guided the destinies of Germany. They framed constructive legislation and directed the state in the same general direction. Both were possessed of boundless imagination as to the ultimate destiny of the German people. They were not seriously distracted by political controversy. They ruled by party coalitions when that was possible; and when it was not, they ruled without parliamentary sanction. Their control over Prussia was absolute, and through Prussia their control of the empire was almost equally so. They chose their own associates, and they chose them from the feudal class. And they fashioned Germany to their liking, not for military purposes alone but for industrial and commercial aggression as well. The legislation which they promoted, even the social legislation for the protection of the working classes, was in harmony with the early traditions of Prussia. The laws they insisted on involved no violent break with the

past. Rather they were a continuation of the paternalism, of the feudalism, of the ascendancy of the state over the individual, to which Germany had long been accustomed.

A third influence in the making of Germany is education—an education which begins with the cradle, that is compulsory, and is open even to the poorest, who are able to make their way through the secondary schools, the academies, technical colleges, and the university, if they have the ambition and the ability to do so. Nowhere, not even in America, is university training so universal as in Germany; and nowhere are there fewer obstacles to cultural opportunity. Moreover, education is a matter of the most serious official concern by statesmen and experts. It is adjusted to every activity, to every industry, and every scientific need. And it is a public rather than a private function. The appropriations for this purpose are generous. The standards of elementary education are prescribed by law, to which all communities must conform. Elementary education is obligatory. Above the minimum requirements prescribed by the state local authorities may go as far as they choose, and the greatest diversity exists in the development of higher education not only between the universities, which are found in almost every state of the empire, but among the municipalities as well. Cities maintain a great variety of high schools and academies,

in which provision is made for all kinds of mechanical, vocational, and artistic study. There are gymnasia for classical training, for science, for the fine arts. In addition, the larger cities maintain colleges of commerce and technology, through which thousands of students are trained for industry, commerce, and state activities. There are 21 universities, with 66,000 students, giving higher post-graduate degrees in philosophy, law, and medicine, and a dozen technical colleges, with 17,000 students pursuing similar advanced courses in engineering and science. Provision is made for training in statecraft and administration. Düsseldorf has a college of city administration and Berlin a college of town-planning, while Frankfort has recently opened a municipal university planned on an ambitious scale. There are numerous technical colleges and laboratories for mining, architecture, forestry, and agriculture, and hundreds of industrial and vocational high schools. And these educational institutions are all closely identified with the state. Their professors and scientists co-operate with the civil and military authorities, while the civil servant is everywhere trained to meet the needs of administration and statecraft. Education, in fact, is a prerequisite of admission to the higher positions in the civil service, while the universities and technical schools are consciously allied with the administration of the empire.

Education in Germany, from the primary school to the higher endowments for scientific research, is an adjunct of the state, not an isolated, detached thing. And it is consciously organized to promote efficiency. A large part of Germany's industrial achievement is traceable to the system of education, just as her international trade is traceable to the commercial colleges, in which thousands of men are trained for the conquest of the trade of the world. Official and industrial Germany is a product of the trained administrator. Education has had a profound influence on the development of the past generation. It has made Germany a land of experts.

All of these influences have reacted upon one another. Obedience is a product of feudal tradition as is the universal ambition for state service which affects all classes. Education gave the Kaiser and the civil service a body of highly trained men, devoted to the Fatherland and condemned by the pressure of competition to a calling chosen early in life. Education supplied industry with scientific assistants and millions of trained hands and brains, prepared from childhood for a definite calling. A respect for authority, coupled with a constitution that legalizes autocratic power, made it possible for the Kaiser to carry through a colossal internal programme, even against the temporary wishes of the nation. There was no responsible ministry to check his will and no popular party to be satisfied, while

the press and discussion were under the strictest surveillance. Intelligent leadership, an overcrowded scientific class, a wonderful system of trade education, and a people trained by generations to respect authority combined in the building of a nation that in a generation's time has become one of the most powerful in the modern world.

All of these influences combined to make the mind of modern Germany what it is, to create a psychology quite different from that of two generations ago, quite different from that of any other nation in Europe. Still other influences contributed in the same general direction. The traditions of a patriarchal feudal state made it easy for Bismarck to carry through his programme of state socialism. The universities and public opinion accepted without protest the taking over the railways, the development of canals and waterways, and the acquisition of mines and other industrial properties. State socialism fell in with the traditions of the state, with the will of the governing classes, as well as the opinions of the academic world. For had not the state owned great landed possessions and forest preserves for centuries and operated them at a profit? Legislation in the interest of the working classes, the old age, sickness, and accident insurance schemes were all part of the traditions of an earlier age and found a sanction in similar activities promoted by the Great Elector and Frederick the Great. New Ger-

many accepted state socialism just as it accepted interference with the lives and property of the individual by the state. It was in harmony with the traditions of the people.

And state socialism has reacted on the people. It has not only increased their dependence on the state; it has created affection for the state as well. One explanation of the devotion of the German people to the Fatherland is the devotion of the Fatherland to the people. This is a most important factor in the psychology of modern Germany, a factor that has been generally overlooked. We in America find this difficult to comprehend. For with us the state performs but few services for the citizen. Our political philosophy permits every one to do pretty much as he pleases. Neither the nation, the States, nor the cities engage in many positive helpful activities. Germany has the other point of view. The common good is a matter of constant concern, and the state is the greatest of all agencies of service. More than 3,000,000 persons are in civil service. This is one person out of every twenty. And state positions are highly prized. They carry dignity, social position, permanent tenure, and a pension on retirement. These employees and those dependent on them believe in the Fatherland and all that it stands for. It is their whole life to an extent that is difficult for us to understand. In addition, and this is very impor-

tant, the state looks after the individual in countless ways. It serves him all the time. The service is of a paternal sort, it is true, but it is satisfactory to the German people. And this in turn creates a reciprocal love on the part of the people for the state. In addition they have a sense of common ownership in the railroads, the telegraph, the mines, forests, and the agricultural estates. There are insurance funds which provide against accident, sickness, and invalidity, as well as the old-age pensions. If a citizen lives in a city, as 49 per cent. of the people do, he is a joint owner of the street railways and gas, water, and electric-lighting plants, as well as numerous other activities which touch his life in many ways. He is educated in the public schools; the teacher, the health officer, and even the relief committees come to him as aids to his ambition and his well-being. Even the taxes are adjusted so as to fall most heavily upon those best able to bear them. For the bulk of the revenues of the cities and a large part of the revenues of the state come through the income tax, a tax that is paid directly and that is consciously felt by the payer. The payment of direct taxes in turn creates an interest in the state and its many activities. And nowhere in the world do people pay taxes with more willingness than in Germany.

The devotion of the German people in the present struggle is far more than a feudal tradition. It

is not inspired alone by fear or coercion or veneration for authority. Rather it is largely a product of the action and reaction of the state upon the daily lives of the people. The psychology of Germany has a strong economic as well as a historical background. The state may not be dedicated to a good cause, and it may be mistaken in its conception of the value of German *Kultur* to the world. But the people have been so indissolubly merged into the state, so identified with it by tradition, education, and the common ownership of so many things that there has been created a social psychology that is unique in the history of the modern world; a social psychology, too, that is so different from anything with which we are familiar that it is difficult, if not impossible, for us to comprehend the conflicting meanings which Germany presents to the world.

CHAPTER III

THE CONSTITUTION OF THE EMPIRE

WILLIAM I became King of Prussia in 1861. He appointed Bismarck as his chancellor and entrusted him with large powers. Bismarck loved his King and his Prussia. He had no sympathy with democracy, with socialism, or with representative institutions. And with the approval of his master he proceeded to weld North Germany into a federation and later into an empire under the leadership of Prussia. This was his overmastering idea, and from the very beginning he seems to have had a vision of the Germany of to-day under the dominion of Prussia and the Hohenzollerns.

In the process of empire-building his method was one of "blood and iron." In 1864 Prussia and Austria made war on Denmark and annexed the duchies of Schleswig and Holstein. Prussia took Schleswig and Austria Holstein. Two years later Prussia occupied Holstein under a pretext which led to war with Austria, a war for which Bismarck had been preparing for years. A single battle sufficed for the humbling of Austria, and Prussia annexed Holstein and also Hanover, Hesse, Nassau, and the free city

of Frankfort-on-the-Main, which had sided with Austria in the struggle. This was done to round out Prussia. It made her ascendant in the new North German Federation, which was formed in 1867 under the hegemony of Prussia. The Prussian parliament protested that force was not an adequate justification for the annexation of independent states, to which Bismarck replied: "Our right is the right of the German nation to exist, to breathe, to unite; the right and duty of Prussia to give to the German nation the foundation for her existence."

The war with Austria made Prussia supreme in Germany. No humiliating terms were imposed upon Austria, nor was any territory exacted in the treaty of peace. Austria was needed as a potential ally in case of war with France. Following the war a constitution was adopted, under which Prussia became the ascendant force in the North German Federation. The King of Prussia was made permanent president. There was an upper house made up of delegates from the individual states and a lower house elected by universal suffrage. Into this federation the larger states of the south, Bavaria, Baden, Württemberg, and Hesse-Darmstadt, refused to enter.

The war with France followed shortly after. It converted the North German Federation into the German Empire, made up of twenty-five sovereign and semi-independent states and Alsace-Lorraine,

which were voluntarily or forcibly united under a written constitution. In the formation of this union the people of the several states were not consulted. Bavaria, Baden, Württemberg, and Hesse-Darmstadt, which had previously stood aloof, were now incorporated into the empire.

Under the constitution adopted at Versailles the King of Prussia is permanent Emperor. As King of Prussia he has almost autocratic power over three-fifths of the empire, but as German Emperor his powers are defined by the constitution. Certain limitations were placed upon his powers as a necessary concession to the smaller kingdoms, which were loath to lose their sovereign independence. Still the powers of the Kaiser are very great. He is commander-in-chief of the army and the navy and minister of foreign affairs as well. With the consent of the Bundesrat (or council of delegates from the Kings and princes of the federated states) he can declare war and serve execution against any of the federal states when ordered to do so by the Bundesrat. He summons and dissolves the sittings of the Reichstag, with the consent of the Bundesrat. He appoints the chancellor and all other higher cabinet officials, who are his personal representatives. There is no semblance of parliamentary control over the ministry or of responsible party government, such as prevails in England, France, Italy, and other constitutional monarchies. Neither the chancellor

nor the ministry resigns in the face of a vote of lack of confidence. They are not changed upon an adverse election. Neither do they necessarily come from the majority party. The chancellor is such by grace of the Emperor rather than by virtue of any popular selection. He presides over the deliberations of the upper chamber, is the fountain-head of much legislation and has the right, which he constantly exercises, of appearing and speaking in the Reichstag. By these provisions the King of Prussia enjoys almost as great powers in the empire as he does in Prussia. He has back of him the support of his own state, the control of the army and the navy, and the appointment and recall of all of the ministers of the empire.

The power of the Kaiser as well as the influence of Prussia has been greatly strengthened by the personality of the present Emperor. The confederation has become a nation in every sense of the word. The particularism of the individual states of a generation ago has been succeeded by a sense of solidarity which has closely knit the people into a nation. The laws of Bismarck contributed greatly to this end, as has the phenomenal industrial progress of the past generation. Just as Alexander Hamilton moulded the thirteen colonies into a nation by his tariff and internal revenue policy, by the national bank act, by the nationalization of the debt, and the location of the capital at Washington, so Bismarck

and later William II cemented the twenty-five separate states which form the empire into an indissoluble union, in which Prussia is supreme. The federation of a generation ago has become a nation.

The ascendancy of Prussia is further assured by her place in the Bundesrat or Senate of the empire. This is really a council of ambassadors from the twenty-five kingdoms, principalities, and free cities which comprise the empire. The members are not elected by the people; they are appointed by the rulers of the individual states. The vote of each state is cast as a unit and under instructions from the states which the delegates represent. In the Bundesrat Prussia has 20 out of 58 votes, her quota having been increased from 17 by contracts made with smaller states subsequent to 1871, by which they relinquished their representation. Only 14 votes in the Bundesrat are required to defeat any proposed change in the constitution, so that Prussia has more than enough votes to prevent any curtailment of her power. By these provisions the sovereignty of the other states has been relinquished or forcibly taken away by Prussia. Politically, at least, Prussia is Germany, although some of the trappings of sovereignty remain with the constituent states.

The Reichstag is the popular chamber of the imperial parliament. It was a concession to the liberal element of the nation, which had been agitating for a constitution since 1848. It is an escape

valve for public opinion and little more. It offers a forum for discussion and as such exerts real influence, but it has never been really democratic in its personnel, and under the constitution it has little real power and authority. It is the only body in Germany, however, that is elected by manhood suffrage. This explains the large Socialist representation which it contains. Here alone have the Socialists been able to secure an effective representation in politics.

Members of the Reichstag are elected for five years by direct universal suffrage and a secret ballot, members being chosen by districts. But even if the Socialists or radical parties controlled the Reichstag, they would be impotent to carry out their policies, for they could not impose their will on the Bundesrat or the Emperor; they could do nothing to alter the constitution, and they could not establish the cabinet or responsible-ministry system which is of the essence of parliamentary government.

The chancellor, appointed by the Emperor, has the right to appear in the Reichstag to urge government measures. The Reichstag can do as it wills with the chancellor's proposals, but, whatever its action, it does not affect the position of the chancellor, who is responsible to the Emperor alone. If the Reichstag becomes too refractory, he may cause it to be dissolved, and a new election ordered on issues of the chancellor's choosing. This was done

by Bismarck after the attempts on the life of Emperor William I. It has been done on subsequent occasions.

The power of Prussia through the King, the chancellor, and the Bundesrat is further strengthened by her preponderating representation in the Reichstag, where she has 235 members out of 397. Even in the popular branch of the government Prussia is supreme. No coalition of all the other states could overcome her control.

The distribution of seats in the Reichstag is almost as unfair as in the Prussian parliament. Electoral districts have not been changed since 1871, when Germany was almost exclusively agricultural. During the intervening years great cities and industrial centres, from which socialism recruits its strength, have come into existence. But the country districts still enjoy representation apportioned to them nearly fifty years ago. And they are strongly Conservative. Greater Berlin, for instance, sends but 8 members to the Reichstag, whereas it should send 20. All of the members from Berlin are Socialists. The same number of electors in agricultural districts return six times as many members. The same disproportion exists in other industrial centres, all of which, with the possible exception of Cologne, are now represented by Socialist members. In the election of 1907, 20 seats were won by the Conservative party, with an

average vote of but 10,500, while 6 Socialist seats were won with an average vote of 77,500. The average vote per seat won by the Socialists was 69,020, and the average per seat won by the Conservative party was 25,680. Were a system of proportional representation introduced, as in Belgium, or were the seats distributed according to any just basis, the representation of the Socialists would have been 115 in 1907 and 127 in 1903. Nor are the members paid. This is a further check on democracy. Bismarck insisted upon this provision, and the Bundesrat has repeatedly rejected measures passed by the Reichstag providing salaries for the members.

From the foregoing it is apparent that the constitution does not essentially change the character of the eighteenth-century feudal state or greatly impair the power of the feudal classes. Rather it strengthened and legalized them. It gave the ruling classes the sanction of popular approval, even though the nation was not consulted. The constitution crystallized feudalism into legal form. Privilege, which was previously subject to protest or revolution, as in 1830 and 1848, is now authoritative. It has the backing of the nation rather than of the King, and can be enforced by the courts and the army with every show of legality.

The constitution of Germany made concessions to the forms of representative government but safe-

guarded the ruling classes against any real exercise of popular power. The actual power was kept in the hands of an economic class. Privileges enjoyed in an earlier age by force of arms are now enjoyed by law. The German people were given a charter, but the charter contained few rights. Neither the states nor the empire reflect the popular will to any appreciable degree.

Prussia, and, through Prussia, Germany, reflects the economic interests of the great estate owner or Junker. He in effect is the government. He maintains his power in Prussia through a reactionary constitution, the three-class system of voting and the open indirect ballot, which Bismarck himself termed "the worst of all electoral systems." Through these political limitations the Junker controls Prussia and through Prussia the empire as well. He forms a class by himself. And he uses his power to promote his own interests, which are mainly agrarian, to shift the taxes onto others, to maintain the army and the navy, and to resist all electoral reform.

Throughout all Europe government by political parties came in with the written constitution. The system had its origin in Great Britain in which country the line of division was originally between the greater and lesser landlords. In the early half of the nineteenth century, however, the commercial classes obtained control of the Liberal party which

had previously represented the lesser barons and yeomen. They became ascendant under the régime of Cobden, Bright, and Gladstone, when the Liberal party came to represent the capitalist and trading classes. The Conservative or Tory party, on the other hand, has always been the party of the old aristocracy, the feudal classes.

The German Junker has a party of his own, the Conservative. It has ever been the agent of the landed aristocracy. It reflects the will of this class in financial, military, industrial, and social legislation. The Junker is strongly imperialistic; he stands for a powerful army and navy, for all legislation that will preserve his privileges and power, and he stands for little else.

The German manufacturers, the captains of industry, and commercial classes formed another party, the National Liberals. The Clerical or Catholic group, whose strength comes almost exclusively from Bavaria, Baden, and the Rhine Provinces, has still another party, the Centre. Its primary concern is religious and it has used its power for the promotion and protection of the interests of the Catholic Church and the peasant class from which the party derives its support.

Over against these parties are several parties which are much more liberal. The Freisinnige or Radical group is a party of the lesser capitalists, tradesmen, and shopkeepers. It is a free-trade

party. Its controlling philosophy is *laissez-faire*. It is in opposition to the Conservative and Liberal parties on agrarian legislation and a protective tariff. It would liberalize the constitution, democratize the suffrage, free the state from the shackles of feudalism, and rely upon the laws of nature and freedom in the development of the nation. The Radical party is very like the present Liberal party in Great Britain. From this liberal group members of the Reichstag taper off into the Socialists, who form the strongest party in opposition and have the largest vote of any at the polls. The support of socialism comes almost exclusively from the cities and mining districts. Practically every city in the empire elects all or some of its representatives from the Socialist party. It is a party of the proletariat and has been more class-conscious and revolutionary in its doctrines than any socialist group in Europe. Up to the outbreak of the present war it stood aloof from all party alliances and co-operated with none in legislation. It is frankly against all governments save that of the working classes. It is only less hostile to the Radical group than to the Conservative and Liberal ones. It fights its battles alone, is inspired by the class war and the materialist conception of history and politics. It is generally opposed to militarism, a large navy, the "hunger tariff," and the present constitution. It advocates more or less revolution-

ary changes, although the younger men of the party are far more moderate than the contemporaries of Marx and Engels, who continue to control the councils of the party. Socialism has spread all over the empire. Wherever industry has changed sleepy rural districts into communities with an alert working-class population, there social democracy has its adherents organized into branches of the party, or of trade-unions influenced by the spirit of the party.

Divided roughly, the present membership of the Conservative groups in the Reichstag is 74; of the Centre and Nationalist groups of Poles, Guelphs, Danes, etc., 124; of the National Liberals and Progressive and Radical parties 89, and of the Social Democrats 110. Each party reflects an economic class with the possible exception of the nationalist groups.

CHAPTER IV

THE ECONOMIC FOUNDATIONS OF CLASS RULE

THE wars against Austria and France created the German Empire. They made Prussia ascendant. This ascendancy was made permanent by the constitution, adopted after the defeat of France. In the affairs of the empire Prussia has a controlling voice, first, by the hereditary position of the King, as Emperor; second, by the vote of Prussia in the Bundesrat and the Reichstag; and, finally, through the control which Prussia enjoys over any changes in the constitution. Prussia is further supreme by reason of her size, for she contains three-fifths of the population and most of the wealth and industry and almost all of the large cities of the empire.

Prussia rules Germany. And Prussia in turn is ruled by the old feudal aristocracy, by the Junkers, or great estate owners. This, too, is written into the constitution and laws of the land. Privileged class rule, in fact, is the German idea of politics. This is true of the empire, the individual states, and the cities. The class is not the same in the different states, but the rule is always by a limited class.

And over and above them all is the ruling class in Prussia, the old feudal nobility, whose estates are for the most part east of Berlin, in East Prussia, Posen, and Pomerania. In this part of Germany the land is divided into great estates, which have remained much as they were in the seventeenth and eighteenth centuries. There are but few cities and but little organized industry. The industrial regions are to the west, along the Rhine and the North Sea. In 1895—and conditions have not changed materially in the meantime—31 per cent. of all the land in Prussia was in estates of more than 250 acres, while in the eastern provinces of Posen and Pomerania the great estates rose to 55 per cent. and 52 per cent. respectively. The average size of the 8,365 greater estates in East Prussia was 1,132 acres, while the average size of 2,793 estates in Pomerania was 1,380 acres. Many of these estates are of far greater extent, and they are owned by the descendants of the feudal barons of previous times. In France, northern Italy, Switzerland, Denmark, and Scandinavia as well as along the Rhine and in South Germany feudal land ownership was converted into peasant proprietorship by the French Revolution or subsequent legislation. It was scarcely touched in Great Britain, Russia, Prussia, and southern Italy. And it is in these countries that reaction persists. In Prussia especially the feudal aristocracy has remained almost untouched by the liberalizing influ-

ence of the nineteenth century. It has not intermarried with the commercial classes. Nor have the members entered industry or the professions. Content with the old order, they have preserved many of their privileges and almost all of their political and social power.

In this part of Germany the conditions are greatly changed from those described by the great liberator Baron von Stein in the early part of the nineteenth century. He said:

"The appearance of the country displeased me as much as the cloudy, northern climate. Great fields, of which a considerable part lies in pasture and fallow, extremely few people, the whole laboring class under the pressure of serfdom, the fields attached to single farms, seldom well built; in one word, a uniformity, a deadly stiffness, a want of life and activity fused over the whole, which oppressed and soured me greatly. The abode of the Mecklenburg nobleman who keeps down his peasants instead of improving their condition strikes me as the lair of a wild beast, who desolates everything around him and surrounds himself with the silence of the grave."

Stein and Hardenberg attempted to put an end to the old feudal abuses as was done in other countries, but their reforms did not penetrate beyond the southern states. The landowners of Prussia declined to permit the agrarian reforms to be adopted. And during the intervening century they have con-

tinued so ascendant in the government that their feudal privileges remain much as they were a hundred years ago. Upon their estates they still exercise independent manorial jurisdiction, in which the estates are the administrative units. There is little semblance of self-government, such as prevails in the south, while the economic power of the landlords over the lives of the workers and the restrictions of the suffrage preclude the peasants from exercising any real influence in politics.

Still other influences have divorced East Prussia from the liberalizing influences of modern life. There is but little industry and comparatively little intercommunication in this part of Germany. The great landowners live upon their estates (where they enjoy something like sovereign powers) and have only occasional contact with the city. Here they rule with feudal authority, while in the legislative halls they resist all legislation which threatens their privileges or powers.

"So long as Junkerism exists in Germany and is a leading factor in politics," said a German political leader recently, "there is no possible hope of progress." For the German Junker is a reactionary. He is ultimately responsible for the militarism and jingoism which seem to characterize the whole nation. Land monopoly is the economic framework of Prussia, and through Prussia of the empire as well.

The supremacy of the Junker is insured in Prussia, first by property qualifications of the suffrage and second by a distribution of seats in the Prussian parliament, which lodges practically all power in the large property owners and particularly the landed aristocracy of the eastern provinces. In elections to the Prussian parliament the voting strength of the individual is determined by the amount of income taxes paid by him. This applies to state and city elections. The electoral power of the individual is ascertained roughly as follows: The total amount of income taxes paid by all persons is first divided by three. Then those who paid one-third of the taxes are permitted to choose electors, who in turn elect one-third of the deputies to parliament. Then those who paid another third of the taxes elect another third of the deputies by the same indirect process, while the great mass of the people, who have paid the remaining third of the taxes, elect the remaining third of the members.

Under these provisions the poorer classes are practically disfranchised. They have only a semblance of a voice in the government. As the system works in practice, from 3 to 5 per cent. of the electors choose one-third of the members of parliament; from 10 to 12 per cent. elect another third, while about 85 per cent. of the voters elect the remaining third, or would do so were the ballot a secret one and the districts fairly distributed ac-

according to population. It is said that in no less than 2,200 electoral districts the first-class electors, who choose one-third of the deputies, consist of but a single voter. This is the electoral basis of the Prussian oligarchy.

Every effort to change this system has been resisted by the great estate owners. The continuance of their power depends upon the preservation of a system of voting which rests on property rather than on men. It is against this inequality that the Socialist and Radical parties are protesting. It was this that aroused the demonstrations all over Prussia in the spring of 1910.

The unrepresentative character of the Prussian electoral system appears from the election returns of 1908. Two million, two hundred and fifteen thousand, nine hundred and sixty-one persons participated in the election. The Social Democrats polled 601,093 votes and elected 7 members, but should have had 105, under a one-man one-vote system, while the Conservatives, or agrarians, cast 356,110 votes and elected 152 members instead of 62 to which manhood suffrage would entitle them. The Clericals cast a vote of 502,594 and secured 104 seats. They should have secured 88, while the Liberal People's party elected 28 members but were entitled to 40.

In addition the ballot is open rather than secret. The choice of the voter is declared *viva voce*. In

consequence the peasant and agricultural laborers do not dare to vote convictions that are contrary to the wishes of the great landowner, while the workers in the city are under the same fear. As a consequence many remain away from the polls.

In addition to the three-class system of voting and the open ballot election districts bear no relation to the present population. They are distributed so as to give the landed aristocracy an overwhelming advantage. In spite of the growth of cities, more rapid than our own, there has been no distribution of parliamentary seats since before the Franco-Prussian War. In the districts to the east, where the aristocracy controls the elections, the number of inhabitants to each representative is 63,000, while in Socialist Berlin it is nearly three times as much, or 170,000. Berlin has 9 members in the Prussian parliament, but should have 24 under a uniform distribution of seats. One election district in Prussia has 34,000 inhabitants, while another has 323,000. One-fourth of the population in the sparsely populated districts elects 161 deputies, while another fourth in the cities elects only 41. The Prussian peasant who blindly votes as his landlord orders has many times the electoral power of the far more intelligent elector of the cities. As a consequence while the Socialists polled 18.8 per cent. of the vote in 1903 they failed to elect a single member. In 1908 they returned 7 representatives, at which time, had the

election districts been fairly apportioned, they would have elected 81. On the other hand, the conservative land-owning classes elected 161 members, while the business or commercial classes of the cities elected but 17. The situation is not unlike that which prevailed in Great Britain before the Reform Act of 1832, which swept away the rotten boroughs.

By these devices, the three-class system of voting, the open ballot, and the unequal distribution of seats, the land-owning aristocracy rules Prussia. This is in spite of the commanding importance of industry, of trade, and of commerce, which form the strength and power of the state.

Through the ownership of the land and the control of politics the great estate owners control the lives of the peasants. They not only control their wages but their political and social life as well. They elect their own class to parliament, while through an almost complete control over the peasants they dictate local administration as well. As a class, the Junker is opposed to education for the peasant; he is opposed to every evidence of liberty or democracy, and clings tenaciously to the divine right of the King and his own class to rule.

This is the class that rules Prussia, and through Prussia the empire as well. And the rule is as absolute as though it had been expressed by law. In effect it differs only in form from that of feudal times.

The Junker has always been willing to sacrifice

the commercial classes to his own advantage. He opposed the development of the system of waterways and frankly admitted that his opposition was to prevent the reduction of inland transportation costs, and the consequent competition of foreign farm products. Measures for popular education have been resisted, as well as expenditures for improving the condition of the peasant classes. The Junker would limit elementary education; he would check ambition, either intellectual or otherwise, and prevent the peasant from acquiring any knowledge that will awaken dissatisfaction with his station in life.

From the great estate owners come the chancellors and higher officers of the empire. The Junker officers the army and fills the higher civil service. He moulds the imperial policy and accepts only under protest such small concessions to democracy as Germany enjoys. The merchant class, no matter what its wealth, has never merged with the landed aristocracy as in Great Britain. It has remained separate and apart.

The power of the Junker is further strengthened by a class sympathy and understanding with the King, who is of the Junker class. He, too, is a great landlord. His traditions are those of the landed aristocracy. For the King comes from that class. The relations of the crown and the aristocracy have never been sundered by conflict as in England, in

which country the feudal aristocracy was in a constant struggle with the King from the thirteenth to the end of the seventeenth century. The controversy began with Magna Charta. It was renewed whenever the King endeavored to assert his feudal rights as against the great barons. For the crown was maintained and supported by dues and obligations payable by the great estate owners. During centuries of struggle the right of the King to feudal dues and taxes was encroached upon by the aristocracy, until the King became a mere figurehead dependent on the consent of his greater vassals for revenue, his army, and his power. Such is the position of the King of England to-day. In addition, his ancestors disposed of the crown landholdings to favorites or squandered the great estates taken from the monasteries and the guilds under Henry VIII. This made the King dependent upon the landowners in Parliament for revenue, for the King had no personal revenue of his own. In this long struggle over dues and taxes the British constitution was evolved. It ended in the subordination of the crown to Parliament, which up to 1909 was, in effect, subordination to the landed aristocracy.

The King of Prussia, on the other hand, kept his feudal landholdings. He remained the first of the great barons. His kingly power was but an evolution of feudal primacy. His private estates were the largest in the kingdom. He escaped the civil

wars of England and France largely because he was economically independent of the landed aristocracy. He did not need to go to them for taxes. The bulk of the Prussian revenues came from domain lands, just as the bulk of the revenues to-day come from these and other productive undertakings.

Thus the King and Junker have been in harmony from the beginning of the Prussian Kingdom. Their interests have been identical. The King retained his kingly power because he had no controversies with his barons. The feudal nobility has also retained its economic privileges, while the King has increased his royal prerogatives. This has given Junkerism a sympathetic ally in court and the King a body of supporters unlike that of any other country in Europe except Austria and Russia, where similar conditions prevail.

Here again is an unnoticed explanation of the unity of Germany. It explains the rise of Prussia, the power and the persistence of early feudal conditions. While France and England were involved in civil wars and parliamentary conflicts between the King and the barons, Prussia, by reason of the identity of interest and the absence of conflict, remained unchanged by the currents of modern life. And when it came to framing a constitution the old régime was translated into constitutional forms, with but little essential alteration in the relations of classes. This is one of the most important in-

fluences in the making of modern Germany as well as in the unity of her ambitions.

The Prussian city is also ruled by an economic class, just as is the state. This rule is secured through the same three-class system of voting, which lodges power in the large taxpayers, who in municipal elections are the business men and property owners. Here, too, from 3 to 10 per cent. of the electors choose two-thirds of the members of the city council. Here, too, the Socialists and Labor members are excluded from power. While under manhood suffrage nearly all the cities send Socialist representatives to the Reichstag, the Socialists have practically no representation in the administration of the cities, where they are in an overwhelming majority, and they are never elected to the mayoralty or to the magistrat.

The ruling class in the city is the business men. They control the elections and select men of their own class or view-point to the higher administrative positions. And the business men who rule are not the shopkeepers or the tradesmen, they are the men of large means, the real-estate owners, and house owners. And just as the Junker rules Prussia in his own interest, so the business men mould the city to their interest. But strangely enough they have a far more generous outlook than the aristocracy or the business classes of other countries. Only in matters obviously prejudicial to real-estate interests

do they promote their own advantage. As described elsewhere,¹ they assume a large share of the local taxes, they have municipalized many of the more profitable lines of business, they regulate property in the interest of the community, and build and plan in a far-visioned, patriotic way. No ruling class in the world seems to negative the idea of class control of politics as do the business men of the German cities, for they rule for the city rather than for themselves.

Prior to 1870 Germany was profoundly influenced by the southern states, by Bavaria, Württemberg, Baden, and the Rhine Provinces. It was from this part of the old confederation that the agitation for representative government came. It was from the Rhine Province and the South German states that the revolutions of 1830 and 1848 drew their inspiration. And these states, like Prussia, reflect the economic foundations of the people. But these states, though monarchical in form, are democratic in spirit. And this democracy in turn is traceable to the wide distribution of land ownership among the peasants, who, through ownership, affect the quality of the government.

This part of Germany was profoundly influenced by the French Revolution. Here many of the reforms of Napoleon were accepted. It was in these states, too, that Stein and Hardenberg abolished many of

¹ See chapters XXI, XXII, and XXIII.

the abuses of the feudal régime and brought about the division of the land into small farms, for the most part free from the feudal conditions of an earlier time. As a result of these reforms these states are liberal minded. Even the electoral provisions are more generous to the non-propertied voter. Whereas the three-class system of voting prevails in Prussia, Bavaria has a system of proportional representation under which each party elects representatives in proportion to its voting strength. As a consequence, the Socialists have returned many representatives to the parliament and the city councils, who in turn have elected members of their own party to the magistrat, or executive department of the city.

And just as the politics of South Germany reflect the economic foundations of these states, so the psychology of the people is a mirror of the same influence. The South German is easy-going and genial. He is *gemütlich*. He takes life simply and easily, and, while he recognizes the advantages of the empire and admires the power and forcefulness of Prussia, he chafes somewhat under her arrogance. Even the court life is simpler, more democratic and progressive than in Prussia, while the relations of classes have little of the caste-like hardness which characterizes North Germany. All this is traceable to the long traditions of a home-owning peasantry, whose psychology reflects the sense of freedom which home ownership, wherever it be found, creates—a

psychology not dissimilar to that of France, of Holland, of Switzerland, or of Scandinavia.

Just as East Prussia differs from South Germany, so western Germany differs from both of them. West Germany is the centre of the great industrial development which has taken place during the last forty years. Here are the great iron, steel, cotton, woollen, silk, and chemical industries which have given Germany such eminence. Here are the cities of Essen, Cologne, Düsseldorf, Duisburg, Barmen, Elberfeld, and Crefeld, that form a series of great communities closely related to one another and all dependent upon the iron-ore and coal fields of the Westphalian district. Beyond are the great maritime cities upon the North Sea and the Baltic, with their splendid harbors and shipping facilities. This is the centre from which the new aristocracy of capital has come—an aristocracy which, like the Liberal party in England, struggles with the landed classes for the control of the government. Here is the source of Germany's power in the struggle for world empire; here are many of the most wonderful cities the world has known. Yet, despite the preponderance of wealth and energy and the excess of population, this part of Germany remains subordinate to the landed classes of the east, which still dominate the empire. To some extent the capitalist classes have received social recognition; some of them have reached high places in the ministry.

They are strongly represented in the Reichstag and Prussian parliament. But for the most part their political power is confined to the cities and the lesser governmental positions into which they have entered in recent years. The commercial classes of Germany have not yet achieved the political and social eminence which they enjoy in Great Britain and the United States.

CHAPTER V

RECENT ECONOMIC PROGRESS¹

PRIOR to 1870 Germany was an agricultural country. There was little factory industry, little foreign trade, only a rudimentary navy and the beginnings of a merchant marine. The traditions of the country were those of the soil, of peasant proprietorship in the south, and of agricultural laborers attached to great landed estates in Prussia, Pomerania, and Posen. The urban population was relatively small. The towns were capital cities, *Hauptstaedte*, or sea-ports. As late as the middle of the century only 4 per cent. of the population of Prussia lived in cities of more than 100,000 people, while in 1871 68 per cent. were still engaged in agriculture.

Fifty years ago Germany did not suggest a great empire challenging the world for supremacy, and believing in its destiny as an irresistible power. Aside from the memories of the Great Elector and Frederick the Great there was little in her history to justify such dreams of commanding place. The

¹ Much of the material contained in this chapter is taken from *Germany's Economic Progress and National Wealth, 1883-1913*, by Doctor Karl Helfferich, director of the Deutsche Bank. Where no other acknowledgment is given the statistics of trade and industry are taken from this work.

contributions of the country were of poetry, philosophy, music, education, the inner things of life. The great names of which the world was proud were Goethe, Fichte, Schiller, Lessing, Kant, Mozart, Beethoven, and Heine. Outside of the Prussian aristocracy political leaders aspired to a constitutional government like that of England rather than to extended dominion. A score of states were kept asunder by jealousy, differences of temperament, and economic interest, while the rival ambitions of Austria and Prussia seemed to forever preclude a permanent union of the Germanic peoples. There were few natural resources. The soil was far from rich; in many sections it was barren waste. Industry was undeveloped, and England, the United States, and France had so occupied the field that successful competition seemed out of the question. There were no natural harbors like those of Great Britain and the United States. Most of the ports have been constructed at colossal cost.

It was on such unpromising foundations that the German Empire has been reared. Yet, despite these limitations, the progress of the last generation is without parallel in the history of the world. There is nothing in ancient or modern times to compare with it. So rapid has been the development that the estimated wealth of Great Britain in 1907 was 300,000,000,000 marks, while that of Germany was 350,000,000,000 marks. And this wealth creation has

come about in the short space of a generation, and for the most part during the reign of the present Emperor.

Following the formation of the empire a series of laws were enacted that swept away the remnants of the old state individualism and cleared the way for a great forward movement in trade and industry. In 1873 an Imperial Bureau of Railways was established to control and unify railway transportation. The same year a currency reorganization with gold monometallism as the basis superseded the confusion of coinage of a score of states. The Imperial Bank was started in 1875, and two years later a series of laws were passed covering bankruptcy, judicial reorganization, a civil code, and the reform of criminal and civil procedure. Local government was reorganized. In 1878 the traditional low-tariff policy was discarded and a protective tariff adopted, designed to protect the agricultural classes of the east and provide more adequate revenue. Much of this legislation was inspired by Prince Bismarck. It was almost as comprehensive as that of Napoleon I.

Increasing population is an indication of national greatness only when the well-being of the people keeps pace with growing numbers. And increasing population in Germany has gone hand in hand with increasing per-capita wealth, increasing health and well-being, and the universalization of educational opportunities. During the forty-two years from

1871 to 1913 the population of Germany increased by 62 per cent. The growth from 1871 to 1888 was 7,000,000, or from 41,000,000 to 48,000,000, and from 1888 to 1913 it was 18,000,000, or from 48,000,000 to 66,000,000. The most rapid growth has been coincident with the reign of the present Kaiser, Emperor William II.

Germany's excess birth-rate over the death-rate is higher than in any other country where similar statistics are kept, with the exception of Russia. The annual increase in population due to this excess has remained for a considerable number of years at approximately 800,000, the increase in 1912 being 839,887. The excess of births over deaths in 1912 was 12.7 per thousand. In 1911 the rate in England and Wales was 9.8, in Italy 10.1, in France .9, in the United States, where proper vital statistics are kept, 5.4 to 9.9, and in Russia 17. Not only is Germany a prolific country, but wonderful sanitary provisions and scientific health protection co-operate with a high birth-rate in stimulating population.

Most of the growth of the last generation has been absorbed by the cities. In fact, almost the whole increase, or about 24,000,000, has been added to the urban population. Agriculture claims a diminishing percentage of the people. In 1871 68 per cent. were employed on the land. In 1882 the rural population had fallen to 42 per cent., and in 1907 to 28.5 per cent. During the period from

1882 to 1907 the proportion engaged in industry rose from 35.1 per cent. to 42.5 per cent., and in trade and commerce from 9.9 per cent. to 13.3 per cent.

As a consequence of this shift in population Germany has become an urban nation. Great cities line the river Rhine from the Dutch frontier to Switzerland. They have grown about every harbor on the North Sea and the Baltic. Wherever natural resources or transportation facilities offered an opportunity there a city has appeared. And these cities are not straggling, unkempt collections of factories and work-people, they are cities of commanding beauty, of fine architecture, of spacious streets, and of splendid public structures. The growth in urban population has been even more rapid than in the United States. In 1871 there were only 9 cities of more than 100,000 population, while in 1885 there were 21. To-day there are 48. In 1885 8,600,000 people, or 18.4 per cent. of the total, lived in cities of more than 20,000 people. In 1910 there were 22,400,000, or 34.5 per cent. of the whole. In 1885 there were 21 cities of more than 100,000 people with a total population of 4,400,000, or 9.4 per cent. of the total, while in 1910 there were 48 cities of more than 100,000 people with a total population of 13,800,000, or 21.1 per cent. of the whole. In a short generation Germany has become a nation of great cities, and with few exceptions,

such as the industrial centres of the Rhine region, they are cities of beauty, charm, and great dignity.

This growth in urban population has been accompanied by many of the evils with which we are familiar.

“That this shifting of the centre of gravity of the population from country to town, from agriculture to industry, trade and transportation, has its dark side, is generally recognized, and is denied by nobody. But none the less, the fact cannot be overlooked that it was only the expansion of our industries, our trade, and transportation, that made it possible on German soil to give labor and sustenance to the vastly increased population, to protect us from the misery of overpopulation, and to transform the natural growth of the population into a source of increasing wealth.”¹

Agriculture in Germany partakes of a science. It is not so well developed as in Denmark or Holland. There is not that universal intensive cultivation that prevails in these countries, or in France, Belgium, or Switzerland. For much of the land in Prussia is owned in great estates, worked by agricultural laborers. But scientific agriculture has made great progress. It is a matter of state concern. The landed estates belonging to Prussia and the other states are used as experiment stations. They are leased as model farms or operated by the

¹ *Germany's Economic Progress and National Wealth, 1888-1913*, p. 20.

state itself. And while the acreage under cultivation and the number of people engaged in agriculture remained stationary from 1883 to 1912, new methods of cultivation brought about a great increase in the yield. Fertilizers are extensively and intelligently used, while mechanical power has taken the place of hand labor. In certain sections district central power stations furnish electric power for the operation of all kinds of machines at very low cost, while modern farm machinery has been widely introduced.

How materially these new methods of production have increased the productivity of German agriculture is indicated by the following table:

	AVERAGE FOR THE YEARS 1883-7			AVERAGE FOR THE YEARS 1908-12		
	AREA PLANTED HEC- TARES	YIELD TONS	YIELD PER HEC- TARE TONS	AREA PLANTED HEC- TARES	YIELD TONS	YIELD PER HEC- TARE TONS
Rye.....	5,830,000	5,867,800	1.00	6,168,261	11,012,171	1.78
Wheat.....	1,918,000	2,585,200	1.34	1,911,768	3,962,390	2.07
Summer barley	1,737,700	2,232,800	1.28	1,604,116	3,220,066	2.01
Potatoes.....	2,912,800	25,459,200	8.74	3,315,137	44,220,213	13.34
Oats.....	3,785,000	4,291,000	1.13	4,317,753	8,189,062	1.90
Meadow hay..	5,905,100	16,874,600	2.85	5,949,237	25,024,865	4.21

In some crops the gain has been extraordinary. In the case of rye, in which there was a gain of only 5.8 per cent. in acreage from one five-year period to the other, the increase in the yield was 87.7 per cent., and the increase in yield per hectare was 77.7 per cent.

Similar methods of cultivation give a yield of 22.6 metric cwt. (220 lbs.) per hectare of wheat, as compared with 6.9 for Russia, 13.8 for France, 10.7 in the United States, and 9.3 in Argentine.

Similar results are obtained in the other staples, as shown in the following table:

HAR- VEST YEAR	COUNTRY	YIELD PER HECTARE IN METRIC CWT. (220 LBS.)				
		WHEAT	RYE	BAR- LEY	OATS	POTA- TOES
1912	Germany.....	22.6	18.5	21.9	19.4	150.3
1912	Russia.....	6.9	9.0	8.7	8.5	81.7
1912	Austria-Hungary....	15.0	14.6	16.0	13.0	100.2
		12.7	11.6	13.9	10.4	84.4
1911	France.....	13.8	14.8	14.3	12.6	74.2
1912	Canada.....	13.7	12.0	16.7	15.0	115.8
1912	United States.....	10.7	10.6	16.0	13.4	76.2

From *Germany's Economic Progress and National Wealth, 1888-1913*, Helfferich, p. 55.

All this is the more remarkable in view of the fact that neither the soil nor the climate of Germany is particularly favorable. Much of the land has been worked for generations, much of it in the north and east is far from fertile. Moreover, Germany has had to compete with the virgin soil of newer countries, whose surplus produce has been thrown on the European markets during the past few decades at very low prices. But while the land in the United States has been exhausted by careless cultivation and millions of acres of good farming land have been abandoned, in Germany lands far less fertile and cultivated for generations remain in a high state of

fertility. There are no deserted farms in Germany. In addition great stretches of waste-land, such as marshes, heaths, etc., have been brought into tillage. It is claimed that the area of wheat-land is being doubled by these methods and a comfortable living provided for hundreds of thousands of families.

To some extent Germany has been shielded from foreign competition by a protective tariff, but the tariff has not encouraged agricultural inefficiency, as it has in other countries.

The sugar contents of the beet-root were discovered by a German scientist, and the growth of this industry in recent years has been phenomenal. Improved methods of cultivation as well as manufacture have created a great industry, in which Germany stands foremost. In the year 1912-13 the beet-sugar production amounted to 2,701,000 tons; in Russia, the next largest producer, it was 1,374,000 tons.¹ In twenty-five years the production

¹ The rapidity of the growth of this industry as well as the constantly advancing efficiency of manufacture is shown in the following table:

CROP YEAR	BEETS WORKED UP 1,000 TONS	AREA IN BEETS HECTARES	YIELD OF BEETS PER HECTARE TONS	RAW SUGAR PRO- DUCED 1,000 TONS	AVERAGE OF BEETS REQUIRED TO MAKE 1 KILO- GRAM OF SUGAR KILOS
1888-89.....	7,896	149,411	28	991	7.97
1910-11.....	15,749	477,909	33	2,590	6.08

of beets has doubled, while the sugar-refining from beets has increased two and one-half times.

Similar improvement has been made in the live-stock industry, with the exception of sheep, which require large pastures for grazing. The number of swine, on the other hand, rose from 9,206,195 in 1883 to 21,805,073 in 1912. During the same period the number of cattle rose from 15,786,764 to 20,158,738. Impressive as these statistics are, they fail to tell the whole story because of the great improvement in the quality of cattle, brought about through scientific breeding and the consequent increase in the production of meat and milk.

Germany is far less generously endowed with natural resources than is the United States. Coal and iron are plentiful, while salts, zinc, lead, and copper ores are found in considerable quantities. In recent years these minerals have been mined and utilized most economically and form the bases of the remarkable progress in the manufacture of finished products. From 1888 to 1913 the value of mining products, such as coal, ores, and salts, increased from 700,000,000 marks to considerably more than 2,000,000,000 marks. The coal production in 1887 amounted to 76,200,000 tons, with a total value of 351,300,000 marks. By 1911 the production had risen to 234,500,000 tons, and the value to 1,756,100,000 marks. In 1912 the production had risen to 254,400,000 tons. Germany is the

third largest producer of coal in the world, having almost overtaken England, which a quarter of a century ago produced more than twice as much coal as Germany.

The same is true of iron ore, in which production increased threefold from 1887 to 1911. But the industrial development of the country outran even the production of raw materials, and as a consequence an excess of 9,810,500 tons of iron ore was imported in 1912.

Pig-iron production increased from 4,024,000 tons in 1887 to 15,574,000 tons in 1911, an increase of 287 per cent., an increase larger than that of the United States with its almost untouched ore deposits. The United States produced 6,520,000 tons in 1887 and 24,028,000 tons in 1911, an increase of 268.5 per cent. Great Britain and Ireland, which in 1887 produced more than either of the other two countries, produced less than either in 1911, her percentage of increase being only 30.6 per cent. The same phenomenal progress took place in the finished product. The steel production of Germany increased from 954,600 tons in 1886 to 13,698,600 in 1910, an increase of 1,335 per cent. In 1912 it increased still further, to 15,019,300 tons, the only other country approximating this increase being the United States, in which the increase was 910.3 per cent. from 1886 to 1910.

The enormous potash deposits of Germany,

greater than those of any other country in the world, are another element in her natural resources. And the production of potash has increased with phenomenal rapidity. At the end of the year 1910 the production exceeded 8,000,000 tons, worth over 100,000,000 marks, as compared with 1,000,000 tons, worth 25,000,000 marks twenty years earlier. Phosphate from iron ore is also used as a fertilizer, while the recovery of cyanamide from the atmosphere, supplying the soil with needed nitrogen, is another advance in which Germany has made great progress.

Many by-products have been developed by German science in the upbuilding of her industries. These include the substances taken from mineral coal. The recovery of illuminating-gas in making coke out of mineral coal was one of the earliest discoveries, as was the utilization of coal-tar, a by-product in the making of coke. Compounds of carbon produced from coal-tar are the bases of many important industries, such as dye-works, pharmaceutical preparations, etc., in which Germany is the acknowledged leader.

The industrial progress of Germany is suggested by the increase in steam-power, which in Prussia alone expanded more than fourfold from 1882 to 1907, in spite of the competition of other kinds of motive power. And if we estimate the efficiency of one mechanical horse-power as equal to the labor capacity of ten men, the effective horse-power in

1907 was equivalent to the physical labor of 52,000,-000 men.

Water-power and electricity have also been highly developed, along with the gas-engine, in which development Germany is ahead of other countries. Many wonderful improvements have taken place along these lines, by means of which gases are generated from peat, lignite, etc., which are distributed through district stations to manufacturing plants and transportation systems. Ammonia is a by-product secured in the conversion of peat into gas. The utilization of peat for these purposes has opened up a source of power of enormous extent, especially in the extensive moors of Germany. This new source of energy is the more important in that the utilization of peat transforms great stretches of land into arable territory which had before been almost worthless.

Science is the handmaiden of industry in Germany, as in no other country. Wonderful developments have taken place in iron and steel processes, due to scientific improvements, and iron and steel are fundamental to the manufacture of machinery, railroads, bridges, and structures. They are the bases of modern civilization. Science has co-operated with industry in countless ways in every line of industry.

“The compounds of carbon that can be produced from coal-tar have become the bases of important

new industries, in which Germany, owing to its scientific progress has hitherto enjoyed the unchallenged leadership. It is only necessary to mention the most important coal-tar products, like aniline and alizarin dyes, pharmaceutical preparations like aspirin and phenacetin, saccharine and the various coal oils."¹

Similar improvements to those made in the working up of iron and in coal products have been made in other metals. The application of electricity recovered aluminum from the earth and made it into a great industry. It is of great importance in the development of the modern air-ship and aeroplane industries.

"The splendid development in the utilization of coal-tar has its counterpart in the synthesis of organic dye-stuffs (artificial indigo), in the chemical manipulation of wood (cellulose), in the recovery of cyanamide from the atmospheric air, . . . in the improvements based on progress in biochemistry, and in the industries based on fermentation processes (brewing, yeast manufacture, etc.)."²

In 1912 Germany's exports were 8,900,000,000 marks, of which 5,800,000,000 were in manufactured goods.

"It would be a mistake, however, to assume that the increase in our producing capacity in manufactured goods is fully expressed in the gain of exports.

¹ *Germany's Economic Progress*, p. 33.

² *Idem*, p. 33.

General observation and scientific investigations of a detailed character combine to show that the home market for our industrial products has developed even more rapidly than our foreign sales. It would be rather a too low than a too high estimate if we assume that the producing capacity of German manufacturing industries has been increased threefold in the past twenty-five years.”¹

The progress of German industry has been accompanied by concentration of production into larger and larger units. A far larger proportion of the workers are now employed in great concerns than formerly. In 1907 there were 5,350,025 employees in establishments having over 50 employees, as against 1,613,247 in 1882 and 3,044,267 in 1895, an increase of more than threefold from 1882 to 1907.

Consolidation has developed along other lines just as it has in the United States. Of such consolidations the Krupp works is the greatest example—an establishment which includes coal-mines, coking plants, iron-mines, smelting-works, steel workings, ship-building, the manufacture of machines, cannon, armor-plate, and munitions of war, as well as electrical works, river vessels, and fleets for the high seas.

The following table indicates the growth in the more important industries, both as to the number of persons employed and the steam-power applied.

¹ *Idem*, p. 67.

INDUSTRIES	PERSONS EMPLOYED			
	1882	1895	1907	PER- CENT- AGE IN- CREASE 1882- 1907
Mining, smelting, and salt- works (also wire-drawing for 1882).....	430,134	536,289	879,600	104.5
Stone and earths.....	349,196	558,286	747,057	111.1
Metal-working.....	459,713	639,755	905,968	97.1
Machinery.....	356,089	582,672	1,171,733	229.1
Chemicals.....	71,777	115,231	167,670	133.6
Illuminating materials (fats, oils, soap, etc.).....	42,705	57,909	95,957	124.7
Textiles.....	910,089	993,257	1,094,955	20.3
Paper.....	100,156	152,909	225,046	124.7
Leather.....	121,532	160,343	206,313	69.8
Wood and wood-working...	469,695	596,496	736,424	56.8
Foods, beverages, etc.....	743,881	1,021,490	1,260,590	69.5
Clothing trade and cleaning	1,259,791	1,390,604	1,562,382	24.0
Building trade.....	533,511	1,045,516	1,576,804	195.6
Printing, art reproduction, etc.....	85,394	147,746	243,262	184.9

	STEAM POWER (IN H. P.)			ELECTRICAL POWER 1907 IN 1,000 KILOWATTS
	1895	1907	PER- CENT- AGE IN- CREASE 1895- 1907	
Mining, smelting, and salt- works (also wire-drawing for 1882).....	995,069	2,332,968	134.5	423,783
Stone and earths.....	197,796	508,682	154.7	88,570
Metal-working.....	142,141	443,224	211.8	123,909
Machinery.....	184,821	1,215,512	557.7	225,026
Chemicals.....	83,587	192,905	118.9	42,288
Illuminating materials (fats, oils, soap, etc.).....	29,942	77,265	158.1	13,368
Textiles.....	515,583	886,373	71.7	75,126
Paper.....	201,422	412,908	104.9	54,966
Leather.....	32,377	85,304	163.5	19,302
Wood and wood-working...	203,235	346,024	70.3	56,325
Foods, beverages, etc.....	686,263	1,185,819	72.8	152,763
Clothing trade and cleaning	19,235	54,852	185.2	18,999
Building trade.....	46,274	189,117	306.7	21,497
Printing, art reproduction, etc.....	18,793	35,974	91.4	40,950

Along with the internal development of the country has gone a remarkable development of overseas trade. Germany has reached out for the markets of the world. In this competition she has rapidly distanced not only Great Britain but America as well. The foreign trade has reached colossal proportions in a few years' time. The growth in the value of exports from 1887 to 1912 in three leading industries is as follows:

YEARS	COKE	ANILINE AND OTHER COAL- TAR DYES	ARTIFICIAL INDIGO
1887.....	<i>Marks</i> 9,400,000	<i>Marks</i> 42,500,000	<i>Marks</i> 6,300,000
1913.....	126,400,000	133,800,000	45,200,000

In 1912 the foreign trade of Germany amounted to 19,600,000,000 marks, of which 10,700,000,000 was of imports and 8,900,000,000 of exports. Of the imports, however, only 1,600,000,000 marks was in finished goods, the rest being in food products, raw materials, and semimanufactured goods, upon which labor was subsequently employed. At the same time over two-thirds of the exports, or 5,800,000,000 marks was in manufactured goods.

Machinery holds the first place in value in the export trade, and amounted in 1912 to 630,300,000 marks, as compared with 52,800,000 marks in 1887. The export value of coarse and fine iron goods rose from 16,000,000 marks in 1887 to 580,980,000 marks

in 1912. Motor-car exports amounted to 65,000,000 marks alone in 1912. The value of coal exported grew from 79,900,000 marks in 1887 to 436,600,000 marks in 1912.

The export values of certain finished and semi-finished textile goods increased in a scarcely less remarkable degree, as is indicated by the following table:

	VALUE IN MARKS	
	1887	1912
Cotton goods.....	67,300,000	421,600,000
Woollen goods.....	177,600,000	253,400,000
Silk goods.....	16,100,000	190,900,000
Woollen yarns.....	34,000,000	84,200,000
Cotton yarns.....	17,700,000	64,100,000

The growth of Germany's overseas trade is further indicated in the tonnage arriving in German ports. In 1887 the aggregate tonnage of ships registering in German ports was 1,675,498, as compared with 5,917,242 in other European ports. In 1911 the ships registering in German ports had increased to 5,397,913 tons, as against 15,330,757 tons in other European ports. In the vessels cleared the registered tonnage amounted to 1,661,471 in German ports in 1887 and 4,467,353 from other ports. In 1911 the tonnage had risen to 5,495,791 from German ports, as compared with 8,975,665 from other European harbors. This tonnage refers only to merchant vessels carrying cargoes. In 1913 there were only two ports whose foreign traffic exceeded

that of Hamburg, and these ports were Antwerp, whose import and export trade is largely for German account, and the port of New York. Despite many limitations, a restricted seacoast and difficult harbors, Germany has won a dominant position on the sea, surpassed only by that of Great Britain.

In the matter of commercial fleets Germany's proportion of the total seagoing commerce at the

**GROUP OF SAILING AND STEAM VESSELS AND TONNAGE
OF GERMANY, THE UNITED KINGDOM, AND THE
UNITED STATES.**

SAILING AND STEAM VESSELS			
COUNTRY	YEAR	NUMBER	1,000 REGISTER TONS
Germany:	1885.....	4,102	1,275.5
	1911.....	4,732	3,023.7
United Kingdom:	1885.....	23,662	7,430
	1911.....	20,919	11,682
United States:	1885.....	23,963	4,265
	1912.....	21,278	4,618.3*

* Gross tons.

STEAMSHIPS			
COUNTRY	YEAR	NUMBER	1,000 REGISTER TONS
Germany:	1885.....	664	420.6
	1911.....	2,009	2,513.7
United Kingdom:	1885.....	6,644	3,973.0
	1911.....	12,205	10,711.4
United States:	1885.....	5,399	1,494.0
	1912.....	10,309	2,470.6

outbreak of the war was far behind that of Great Britain and considerably behind that of the United States, although the steam tonnage of Germany was somewhat ahead of the latter country. But it is the rate of growth that is most significant, and

in this respect the progress of Germany has been greater than either of the other two powers.

Germany's overseas trade has been accompanied by a policy of colonial expansion, upon which the country entered about 1885. England had already appropriated the greater part of the available colonial possessions and concessions during her uninterrupted supremacy on the seas. A similar policy had been pursued in a more limited field by France, Italy, Holland, and Belgium. It was in the face of great difficulties that Germany entered on a colonial policy, which began in Africa and the South Seas in a very modest way. By 1913 the colonial empire of Germany amounted to 2,900,000 square kilometres, about five times the area of the German Empire, in which there is a native population of more than 11,000,000 people. In these colonies, which are situated in South Africa and the southern Pacific, the white population is still negligible, being only about 27,000. As a matter of fact, the colonial policy of Germany has been a failure even from the point of view of the empire itself. However, there has been a considerable extension of railway building and commercial development. The aggregate trade of the African colonies and of the South Seas grew from 46,000,000 marks in 1898 to 263,000,000 marks in 1912, while the trade of Kiao-Chau, the most successful of all German colonies, rose from 34,500,000 marks in 1902 to

195,000,000 marks in 1911. But the colonial expansion of Germany is but incidental to other financial and commercial overseas undertakings. Immense sums have been invested in development projects like the Bagdad railway and the Shantung railway in China, which opened up extensive regions and gave promise of developing great sources of supply for German products. And in this colonial development, foreign exploitation and merchant-marine promotion the resources of the whole nation have been interlocked as a great engine of promotion, including vocational and technical education, the development of trade-schools and colleges of commerce, the sending of thousands of trained men into every section of the globe to familiarize them with commercial needs, to which is added governmental encouragement of every possible kind.

With rapidly growing industry at home and an increasing population came the need of creating "permanent and well-anchored supports beyond our frontiers." The solid basis of Germany's commerce is in her home industry, but to a large extent she is dependent on foreign parts for the supply of raw materials for manufacture and markets for the disposal of her surplus. For the purpose of keeping foreign markets open to her goods Germany developed a system of long-term commercial treaties. That this policy has not altogether satisfied her needs is shown in the following significant para-

graph of Doctor Karl Helfferich, director of the Deutsche Bank, written in 1913:

“With the negotiation of treaties for securing the interests of our commerce and shipping, however, we have not been, and dare not be, satisfied to stop. Our dependence upon foreign countries, the counterpart to the great advantages derived by us from having taken our place in world-economy, calls for stronger counterpoises. Such a counterpoise can be created by German enterprise and German capital establishing a field for their activity beyond the borders of our country, and thereby gaining a direct influence over foreign territories that may be important to us as sources of supply and as markets. This can be done in an effectual way by acquiring oversea colonial possessions; for in such case economic influence is secured and strengthened in the most effective manner possible by political domination. In so far, however, as this way is limited or barred up altogether—for when Germany, after the restoration of its political power, first cast its eyes over the seas, it found unfortunately that the colonial world was already for the most part occupied—our end must be reached by means of a far-sighted financial and economic activity.”

Germany's industrial prosperity has been accompanied by a great increase in wealth and a general improvement in the standard of living of all classes. In 1870 the standards of the country were, for the most part, those of agricultural workers, of peasants, for there were but few large cities and little industry. Wages were for the most part low,

the division of labor had not been carried to any appreciable extent, and the number of workers receiving substantial incomes was relatively small. The improvement in the last twenty-five years has been striking. It is confirmed by such Socialists as Bernstein. It is evidenced not only in the income-tax returns but in the per-capita consumption of standard articles, such as tea, coffee, and cocoa-beans.

TABLE SHOWING THE CONSUMPTION OF COFFEE, COCOA-BEANS, TEA, AND RICE

YEAR	COFFEE		COCOA-BEANS		TEA		RICE	
	TOTAL TONS	PER CAPUT KILO	TOTAL TONS	PER CAPUT KILO	TOTAL TONS	PER CAPUT KILO	TOTAL TONS	PER CAPUT KILO
1886-90.	114,263	2.38	4,954	0.16	1,912	0.04	84,375	1.76
1912....	168,158	2.53	53,601	0.81	4,126	0.06	161,072	2.43

The consumption of cotton in the year 1912 was 501,660 tons, or 7.56 kilograms per caput.—*Germany's Economic Progress and Wealth*, p. 124.

The per-capita consumption of cotton increased from 4.19 kilograms, the average for the years 1886-90, to 7.56 kilograms in 1912, an increase of 80 per cent. Cotton is the most important of all the raw materials in the clothing trades, and this increase mirrors the greater variety of wants and their increasing satisfaction by the people.

The same thing is indicated by the savings-banks deposits, which in 1888 amounted to 4,550,000,000 marks, while twenty-five years later they had grown to 18,000,000,000 marks, or an increase of nearly

400 per cent. The total deposits for the whole country in banks, saving funds, and the co-operative societies increased from 6,500,000,000 marks in 1888 to more than 30,000,000,000 marks in 1913.

Inasmuch as the income-tax system did not become fully operative until 1896, although it was provided for in 1892, the statistics of income-tax returns are available for only sixteen years. They show a growth of nearly 100 per cent. in this period. The total incomes, including those exempt, in Prussia alone, amounted in 1896 to 12,855,261,000 marks. In 1901 they amounted to 15,347,548,000 marks, in 1906 17,467,934,000 marks, in 1911 21,629,650,000 marks, and in 1912 22,311,749,000 marks. But even under the thoroughgoing system of collection which prevails in Prussia, a certain amount of taxable incomes inevitably escapes, which is estimated at 10 per cent. on the total taxable incomes for 1912, or 15,240,000,000 marks. There should be added 1,524,000,000 marks, which should be increased by further additions, which would raise the aggregate income for Prussia alone to about 24,000,000,000 marks.

The population of Prussia in that year was about 40,000,000, which would give an average income of nearly 600 marks per capita, or between 2,500 and 3,000 marks per family. This is about the average income in the other states of the empire, although in the Hansa cities, Hamburg, Bremen, and Lübeck,

it amounts to nearly 1,000 marks per capita, while in the Thuringian estates it is considerably lower. The total private incomes for all Germany is estimated at between 39 and 40 billion marks. The increase in the aggregate income for the past sixteen years amounts to about 80 per cent., and the increase in the average per-capita income to about 45 per cent.¹

It is also claimed that the distribution of earnings shows a similar favorable change. From 1896 to 1912 the number of persons in Prussia alone exempt from taxation, including their dependants, because their income was less than 900 marks, fell from 21,066,000 to 16,105,000; while the number of taxpayers, including their dependants, increased from 10,283,000 to 24,232,000. In 1896 more than two-thirds of the people were exempt from the income tax, while in 1912 not quite two-fifths enjoyed incomes below the exemption point.

Similar increases in taxable income are shown in the various groups during these years. Thus the number of taxpayers in the group enjoying incomes from 900 to 3,000 marks increased from 2,321,000 to 6,123,000, and their total incomes from 3,197,000,000 marks to 8,584,000,000 marks, an increase of about 250 per cent. It was in this group that the greatest increase is registered. The number of taxpayers and the total incomes in the group of those receiving

¹ *Germany's Economic Progress and Wealth*, p. 97.

from 6,000 marks to 9,500 marks per annum was nearly doubled.

The wages of miners increased nearly 200 per cent. from 1888 to 1912. The wages in the mine-inspection district of Upper Silesia, for instance, rose from an average wage of 516 marks in 1888 to 1,053 marks in 1912. In the mine-inspection district of Dortmund it rose from 863 marks the first year to 1,586 in the latter year. These figures are for net wages, after deductions have been made of the payments for various kinds of insurance, which have increased greatly during the last few years. In the Rhenish-Westphalian district the payments for the various forms of insurance amounted to 204 marks per capita in 1912. Comparing wage increases in Germany with those in England, Doctor Helfferich says:

“The increase in wage incomes in Germany becomes more striking through a comparison with England: The average yearly earnings of the English coal miner in 1900 amounted to 1,732 marks, against 1,332 marks for the German miner in the Ruhr (Essen) district. In the year 1912, on the other hand, the English average was 1,622 marks, and the German 1,586 marks. Besides this, the German figures here given represent net earnings; whereas the British miner has to pay out of his earnings all the contributions to various forms of insurance, except 20 marks a year per caput which the employers must pay as their average contribution for accident insurance. If we add these

20 marks to the earnings of the British miner, and the 204 marks mentioned above as insurance contributions to the earnings of the German miner, we get an average wage of 1,642 marks for the English miner in 1912, but 1,790 marks for the German miner in the Ruhr district. The difference in favor of the German miner in 1912 was therefore about 148 marks, whereas it had been in 1900—also after taking into account the insurance contributions of that time—278 marks in favor of the British miner."

These are some of the achievements of peace under a system of universal military conscription, which takes every able-bodied man from wealth production for from two to three years of his most active life. It was achieved under heavy and increasing tax burdens for naval and military preparation as well as for education and other purposes. It was accompanied by colossal expenditure for the building of the most wonderful cities of the modern world, the construction of great railway systems, of thousands of miles of canals and navigable waterways, of docks and harbors, as well as millions expended in unproductive enterprises and activities for the health and well-being of the people.

How has this been achieved? By what statesmanship has an agricultural state, only emerging from eighteenth-century feudalism a half century ago, been raised to a position of commanding industrial, commercial, and agricultural importance? How has the face of the nation been changed, its tra-

ditional policies and activities reversed, and an industrial empire erected in a few short years upon such unpromising foundations? This it will be the purpose of the succeeding chapters to answer.

CHAPTER VI

THE THEORY AND EXTENT OF STATE SOCIALISM

AMERICA and Germany have widely divergent ideas as to the nature and functions of the state. We emphasize the right of the individual. His property and his privileges are jealously protected by the Constitution and the laws. The powers of the state are limited. They are carefully enumerated in the constitution. It is assumed that the state should have as little as possible to do with business; it should leave productive industries to private initiative and should give the individual the greatest possible freedom on the assumption that this is the best way to promote the common good. It is generally assumed, too, that the state is incompetent; that its functions should be limited to those of protection from domestic and foreign aggression.

This is the philosophy of individualism, of *laissez-faire*; a philosophy born of pioneer conditions and later written into our organic law. This philosophy was the product of freedom in America. In Europe it was a reaction against the feudal conditions which prevailed prior to the French Revolution.

There was universal supervision of trade and industry. Internal and external tariff barriers everywhere prevailed, while privileges and restrictions on commerce and trade interfered with the freedom of the individual. France abolished many of these restraints with the Revolution. The idea of industrial liberty was carried into England and developed into a philosophy by Adam Smith and Ricardo, the fathers of political economy in that country. Later the teachings of these economists became the working philosophy of the commercial classes who desired free trade and relief from the mediæval restraints on the individual which the feudal classes struggled to retain.

We in America have carried these ideas to even greater extremes. As time went on they were crystallized into law and made permanent by our constitutions and judicial decisions. The public opinion of the nation became identified with this philosophy. As a nation we still think and act in terms of an earlier age, just as do the Germans. We, however, think in terms of pioneer conditions, they in terms of feudal conditions. We have so weakened the state that great aggregations of wealth have become more powerful than the community, while Germany has so strengthened the state as to devitalize the individual.

There have never been any presumptions in Germany against the state. From earliest times

great landed estates and forests have been owned and operated as part of the fiscal system. The lives and property of the individual have been regulated with inquisitorial officialism. The state has been supreme in the eyes of all classes. It has been feudal, paternalistic, agrarian. There has been no bill of rights for the courts to construe or jealous insistence on personal liberty on the part of the people.

The universities reflect this point of view. They find a sanction of state socialism in the history and experience of the country, just as our universities find a sanction of *laissez-faire* in the teachings of Adam Smith, Ricardo, and the statesmen of Great Britain. Each country has evolved its own political philosophy from its own experience and self-interest as understood by the ruling classes. English political economy has never influenced the German mind as it has the French. Adolph Wagner and Gustav Schmoller, both leading professors in the University of Berlin, approve of a wide extension of state activities, and Wagner has carried his advocacy so far as to be classed by many with the political socialists. And public opinion approves of the subordination of the individual to the state and the restriction of the play of self-interest when it becomes harmful to its members. In the mind of the Germans the functions of the state are not susceptible of abstract, a priori deductions. Each

proposal must be decided by the time and the conditions. If it seems advisable for the state to own an industry it should proceed to own it; if it is wise to curb any class or interest it should be curbed. Expediency or opportunism is the rule of statesmanship, not abstraction as to the philosophic nature of the state.

This point of view is known as monarchical socialism, state socialism, or the socialism of the chair. And all Germany accepts it as the most natural thing in the world. It is not the opinion of the ruling class alone. It is the opinion of all classes. There is almost no dissent to the assumption of state supremacy, of subordination of the individual, of the necessity for personal and class sacrifice to the Fatherland, even when the sacrifice is imposed by a ruling class. The individual exists for the state, not the state for the individual. Modern Germany has the social psychology of the cities of ancient Greece. It is the psychology of the old feudalism adjusted to new conditions. Life has changed, but the habit of mind has remained much as it was in the eighteenth century.

This paternalism does not necessarily mean less freedom to the individual than that which prevails in America or England. It is rather a different kind of freedom. Political freedom, freedom of speech and the press, and the right of assemblage are not recognized in Germany; they are not protected by

the constitution and the laws as an inalienable, natural right. Rather there is endless supervision of the individual. *Verboten* is the law of the land. The daily life of the German is supervised by countless officials under the police power of the state; he is subject to regulations without number upon his daily personal acts. The German, however, does not resent this interference. The rules and regulations are accepted as the rules of the road. They make it easier for the average man to live; and, aside from the organized political protests against electoral abuses, the privileged suffrage, and the interference with freedom of speech and the press, there is practically no resentment in Germany against the paternalistic inquisition into the personal activities of the people.

In other respects, however, the German enjoys a freedom far greater than that which prevails in America and England. This freedom is of an economic sort. Privileged interests are kept under control. There is no favoritism upon the railways or waterways. Terminals and harbors are owned by the cities, and water and rail transportation are accessible to all on equal terms. Through the ownership of industrial sections, cities offer building sites to all on easy and equal terms, so that capital is encouraged to enter any field without fear or favor. Credit is under control; while the state itself through its ownership of mines and natural resources keeps

the raw materials of production open and accessible to all on competitive terms. State socialism insures that economic freedom which we in America have sought to secure through the unrestrained play of private initiative. Social legislation directed against the exploitation of the worker and the consumer insures freedom in many other ways. It protects the defenseless classes from exploitation and abuse. It safeguards the weak. Universal education offers opportunities to even the poorest to advance whether it be in the service of the state or in the fields of individual effort. Germany protects industrial and social equality, while America protects political and personal equality. Her freedom is in the economic, ours in the political field.

We find state socialism carried further in the cities than by the state. And this is where it should be least expected. For the cities are ruled by the business men, who have received but scant courtesy from the landed aristocracy or the ruling classes in the empire. The dominant note in the cities is commerce, trade, industry, as it is with us. Despite this fact and the control which the business men enjoy through the three-class system of voting, there is far less exploitation by privileged interests than in America, far less than in England. The business men assume the burdens of direct taxation with surprising willingness. They impose progressive income taxes, often rising to 10 or 15 per cent. for all

purposes, upon their incomes. They impose taxes on business, land, and the unearned increment of land values. They burden their cities with indebtedness to make them beautiful and livable and spend generously for education and other purposes. They have municipalized the street railways, gas, electric-light, and other public-service corporations and have entered into municipal land speculation and house-building activities in competition with themselves. Cities own banks. They regulate property for the good of all and the protection of posterity. They build and plan for the future with a big vision of the city as does no class in any cities in the world.

This acceptance of control, of regulation, of state socialism is indicative of the point of view of Germany. It is not a patriotism for the Kaiser alone. It is a patriotism for the Fatherland. With such a background and with such a conception of the relative importance of public and private rights, it is easy to understand why state and municipal socialism have developed so rapidly in Germany during the last quarter of a century.

The entrance of the state into industry has been simplified, it is true, by the fact that the ruling class is the landed aristocracy. The great estate owners, or Junkers, did not own the railways or the public-service corporations of the cities. They were not interested in manufacturing or commerce. They

live on their estates and have but little interest in industry. Nor have they married into the commercial aristocracy as they have in England, where the landed aristocracy has been merged with the railway, financial, and capitalist classes. The Junker has always kept aloof from commerce, for which he has little real respect. As a consequence there was no conflict of interest in the determination of policy. The dominant political class has not been opposed to state socialism, so long as state socialism did not interfere with its own privileges and property.

Finally, Germany did not emerge into an industrial state until after the Franco-Prussian War. The traditions of feudalism continued long after they had passed away in France, England, and those parts of Europe where the French Revolution exerted an influence.

With such traditions as these it was perfectly natural for the state to undertake new activities and tighten its control over individuals or corporations whose actions were ^{against} inimical to the state. If the state could own great estates and manage them at a profit, if it could care for its people in time of distress, why should it not perform other functions, which in modern times lie close to the life and well-being of the state, especially when the things to be owned and the interests to be regulated were the property of a class which was but scantily represented in the councils of the nation.

Added to these considerations is the fact that the civil service in Germany is very efficient. It is also permanent. Government service is the goal of all classes. The official service is recruited from the best talent of the nation. Admission to responsible positions in the civil service is only open to those who have pursued collegiate or engineering training followed by the severest kind of examinations. Titles are universal and are scrupulously observed, even if they be of an insignificant sort, while a system of universal pensions gives assurance to government employment that adds much to its attractiveness. There are a hundred trained men seeking admission to every governmental opening. The majority of the candidates have been preparing for the service from the time they departed the secondary schools, and in the majority of instances they have consciously directed their education to a particular field of activity. Men are not educated democratically for any career as in America. They do not turn their hand from one occupation or profession to another. Rather they are trained, in a killing competition, to the particular employment in which they make a start. Rarely is there an opportunity to turn back once the decision is made. And in the government service the choice is only to go forward or drop in the pace, and in many cases failure means suicide. For suicide is common among the educated proletariat of Germany. With such a civil

service as this, Germany has been equipped to undertake any activity and to carry on any undertaking.

There is no clearly defined line of demarcation between the industries that should be socialized and those that should not. All forms of transportation are in the hands of the state, including the railways, canals, waterways, docks, harbors, ter-

PROPERTIES OWNED	CAPITAL VALUES	NET PROFITS FROM OPERATION
Farms.....	\$198,122,725	\$7,925,309
Forests.....	730,898,200	29,235,928
Mines.....	128,907,725	5,116,309
Railways.....	4,706,904,750	189,916,190
Telegraphs.....	.....	.....
Telephones.....	694,816,650	27,792,666
Express.....	.....	.....
Mails.....	.....	.....
Other works.....	435,184,900	17,407,476
Total.....	\$6,894,834,950	\$277,393,878

minals, telegraphs, telephones, and express business. Coal, iron, and potash mines are operated, while great forests and agricultural lands have been owned by the states and cities from very early times. Individual states own porcelain manufactories, banks, lotteries, baths and mineral springs, amber works, and breweries. The state printing works produced a revenue of \$800,000 in 1913, while the shares owned in the Imperial Bank yield a substantial sum. Prussia is the largest single mine and mineral owner

in the kingdom, and in 1906 operated 36 mines, 12 smelting-works, 5 salt-works, 3 stone-quarries, and 1 amber works.

The total capital value of the principal activities owned by the empire and the states is approximately \$7,000,000,000, and the net annual profits are nearly \$300,000,000, distributed as shown in table on page 89.¹

The field of socialization is being constantly extended. In 1908 the Prussian Diet appropriated \$15,000,000 for the sinking of new coal shafts, while in the building of the Weser Canal from the Rhine to Hanover \$5,000,000 was set aside for the purchase of land on both sides of the canal way so that the community could retain the unearned increment from the increase in land values which the building of the waterway created. In addition by the ownership of the riparian property the whole development could be so planned as to provide factory sites and distribute industry and population over a large area admirably suited for manufacturing and at the same time so distribute population as to prevent the appearance of bad housing conditions. The government of Saxony has proposed the erection of large cast-steel works for the making of rails and other material needed by the state-owned railway lines.

The Post Office Department operates savings

¹ Roberts, *Monarchical Socialism in Germany*, p. 7.

banks, and millions of persons have checking accounts with the post office the same as with a private bank. The German postman takes orders for dry goods, groceries, and other commodities at the door and later delivers them at a nominal charge. The parcel post is universally used for the distribution of products of all kinds. It is a great marketing agency, and through it many hundreds of thousands of people purchase their food supplies directly from the farm. To such an extent has public banking superseded private banking that 92 per cent. of all deposits are in public institutions. Cities also operate pawn-shops as an aid to those in distress and have done so for generations.

Bavaria has insured her farmers against fire, hail, and the loss of live stock for generations. At the present time about \$20,000,000 of property is insured by the state against fire, while 142,000 farmers are insured against loss by hailstones to the extent of \$57,500,000. Cities also carry on the fire-insurance business. Recently the state and local authorities have begun the development of hydroelectric plants. Some years ago a group of rural districts determined to unite for the purpose of erecting a central power station to serve a district in Cassel. A representative of the government appeared and announced that the state had decided to carry out a similar project; so the local plans had to be dropped. The government project involved the construction

of a large overland station to serve the northern part of the Province of Hesse and the southern part of the Province of Hanover, the water-power to be obtained from three sources. The most important electric-power project is that of the Bavarian government for utilizing the water of the Bavarian highlands for the supply of electric light and power to all parts of the country. The government does not plan to carry out this scheme itself, but formulated the general features of the proposal and left the execution of the various works to others with the object of securing co-ordinated action and a proper regard for the public interest. Not only is power to be supplied for industrial, agricultural, and domestic purposes, but several lines of state railways are to be electrified as well.

The number of employees in the imperial and state service is growing every year. In 1908 it was about 3,000,000. There were then 563,684 in the railway service, 309,026 in the posts and telegraphs, 390,005 in police and diplomatic, and 125,980 in forestry and game-preserving.¹

Immense profits are realized from these activities. In 1908 the profits of the empire and of the states composing it amounted to \$277,285,095. In 1911 the profits amounted to \$282,749,224. These earnings are used to reduce the burdens of taxation. The combined federated states secure 38 per cent. of their

¹ Berry, *Germany of the Germans*, p. 47.

total revenues from their enterprises, while, including the imperial government, one-fourth of all the current needs of the combined governments are derived from business undertakings. Of the larger states, Bavaria secures 39 per cent. of its revenue from industrial undertakings, Württemberg 38.7 per cent., and Prussia 47.56 per cent.

Herein is one explanation of the relative ease with which Germany supports the colossal expenditures for war and armament as well as the appropriations made in recent years for internal improvements. With from 35 to 50 per cent. of the state revenues obtained from industrial pursuits, the task of the financier is greatly simplified in comparison with that of surrounding countries. When to this is added the ownership of a controlling interest in the Imperial Bank and the actual control of over 90 per cent. of the savings of the people deposited in municipal banks and the postal system, the credit operations of the empire are still further facilitated. The railways are part of the state, as are the express and telegraph business, while the mines supply fuel at the cost of production. Thus the state is almost self-contained, so far as its more important functions are concerned. It is not improbable that the ambitious undertakings of recent years would have been impossible but for these contributing factors, which greatly simplify the problem and relieve the financial burden. Germany's military prowess would prob-

ably have been out of the question without the aid of these socialistic services, while her industrial and commercial advancement would have been difficult if not impossible of achievement.

CHAPTER VII

THE STATE-OWNED RAILWAYS

No single agency has done more for the development of Germany than the state-owned railways. They have aided in welding the twenty-six states into a nation and have contributed in countless ways to the upbuilding of domestic industry and foreign commerce. Their strategic value in time of war has been demonstrated in the present European conflict.

The first German railways were built by private capital under concessions from the individual states, although Prussia had begun to experiment in this field as early as 1850. But private operation was never satisfactory and, following the war with France, Bismarck urged the acquisition of the railways by the empire. At this time the railways of Bavaria, Saxony, Baden, and Württemberg were for the most part owned by these states, and they, jealous of the ascendancy of Prussia and appreciative of the value of their possessions, declined to acquiesce in Bismarck's proposal. But Bismarck persevered in his policy. He saw in the railways a means for the consolidation of the nation as well as a military agency of great strategic value. In addition, through cen-

tralized management, the chaos of state and local rates and charges would be brought to an end.

The refusal of the states to transfer their systems to the empire led Prussia to develop her own system. Most of the more profitable lines were in private hands, and by reason of the monopoly and large earnings which the companies enjoyed they were disinclined to extend their systems to meet the industrial revival which followed the Franco-Prussian War. This and the obvious profitableness of the railways led to the appointment of a committee by the Prussian parliament to investigate the whole matter, which committee subsequently reported that it was desirable from every point of view that all the railways should be nationalized.

Parliament took the first steps in this direction in 1873, first by the enlargement of the existing state system, and second by the acquisition of the lines of a considerable number of private companies. From this time on nationalization was rapid, the negotiations for the most part being carried on in a friendly spirit, for many of the shareholders were agreeable to the sale. The original concessions to the companies contained reservations under which it was possible for the state to acquire the lines upon a valuation ascertained from a capitalization of the dividends earned during the ten years prior to purchase, or in case the roads had not been in operation for so long a period then the dividends earned during

the preceding three years were taken as a basis of purchase. If no dividends at all had been earned then other evidences were to be used to ascertain the value.

This would seem to be a generous basis for acquisition, but inasmuch as many of the roads were acquired by the state in the early years of their working, and as their rates and charges were subject to regulation, the states, and especially Prussia, were often able to buy advantageously and at a low price. However, in most instances the stockholders were treated fairly, and in many instances preferred to exchange their securities for those of the state.

Proceedings similar to those of Prussia were taken by other states, until at the present time over 90 per cent. of the railway mileage of Germany is owned by the several states, the remaining 10 per cent. being in private hands. The latter holdings, however, are for the most part confined to unimportant lines and light railways. The growth in mileage of the states in the empire from 1875 to 1910 is as follows:¹

YEARS	LENGTH OF FULL-GAUGE LINES	LENGTH OWNED BY STATES
1875.....	17,483 miles	.....
1880.....	21,028 "	13,888 miles
1890.....	26,136 "	18,738 "
1900.....	31,049 "	28,570 "
1910.....	36,894 "	34,596 "

As to the general efficiency of the German railways there is no dispute. The service is excellent, the

¹ Dawson, *Industrial Germany*, p. 50.

equipment is of a high order, while the comfort and convenience of the public is considered in every possible way. Accidents either to passengers or employees are of infrequent occurrence. Trains arrive punctually, while the stations are spacious and are usually among the most imposing structures in the city. Passenger fares are low and are adjusted to the purse of all classes, while the profits from operation are so large as materially to reduce the burdens of taxation.

The Prussian railways are the best equipped and best managed of any in the empire, if not in Europe. The capital invested has increased from \$370,000,000 in 1879 to \$2,709,150,000 in 1910. A large part of the capital investment has been earned by the railways and devoted to the extension and betterment of the service. The net profits from operation, after deducting interest on the indebtedness and making ample provision for depreciation rose from \$10,000,000 in 1882 to \$140,000,000 in 1906.

When the railways were first acquired the fear was expressed that the government had entered upon a hazardous financial experiment, but W. H. Dawson, a thorough student of modern Germany, says the transaction has proved to be "a brilliant stroke of business if not the most brilliant ever transacted by a modern state."¹ Continuing he says:

"It is in the domain of railway ownership and administration that the state has achieved its greatest

¹ Dawson, *Industrial Germany*, p. 55.

success. It has been estimated that since they passed into the national possession the German railways have provided \$750,000,000 of revenue. The profits are perhaps swelled by the low wages paid to inferior grades of labor and because there are so many females in the railway service. But the state tries to make up for this by providing houses at low rents, free garden-plots, pensions, bonuses, holidays, etc. It must be admitted, however, that the wage question is still a sore one and is agitated as much as possible under the strict system prevailing, which allows no strikes in this branch of the state service. There is always a temptation to work the railways for more revenue in these days, but on the whole the governments keep well to the front the interests of traffic and commerce."¹

The Prussian state railways are the most profitable of any in the empire and earn approximately 8 per cent. on an actual cash investment of \$2,700,000,000. The net profits from operation in 1911 amounted to \$178,000,000 or more than twice the income from taxes, which was \$85,000,000.² This sum went into the state treasury and reduced taxation to that extent or was used for other public purposes.

Summarizing his opinion of the operation of the Prussian state railroads, Mr. Carl Vrooman says:³

"Unquestionably the Prussian state railways have made the best showing financially of any government

¹ Dawson, *idem*.

² Roberts, *Monarchical Socialism in Germany*, p. 4.

³ Vrooman, *American Railway Problems in the Light of European Experience*, p. 160.

railways in the world, in spite of the fact that the state management has given to the people of Prussia the best and safest transportation service on the continent of Europe and has charged for this service as little if not less than has any continental railway system. At the same time the Prussian state railway system during the last quarter of a century has brought into the state treasury every year enormous sums of money as profits. Indeed there is criticism on many sides that the results have been too brilliant; that industry should not be taxed to relieve general taxation."

By 1905 the Prussian railways had paid into the treasury, as profits, more than enough to pay off every cent of railway indebtedness, including interest, leaving the great system with all equipment as a net asset in the hands of the state. This, too, was in spite of the fact that many unprofitable extensions have been constructed which private capital probably never would have attempted.

A paper read by Professor Herman Schumaker, professor of political economy at the University of Bonn, in January, 1912, before the Royal Economic Society, describes the results that followed national operation.

"The result of all these economies," he says, "is a magnificent one. The aggregate revenue of the Prussian State Railways has risen, during the twenty-five years from 1883-1908, from 536,000,000 marks to 1,910,000,000 marks, or from 34,503 to 52,795 marks per kilometre of railway track. Although

the expenses both of the staff and of the stock and plant have increased very considerably (the cost per kilometre per axle was 5.43 pf. in 1895 and 7.4 pf. in 1908), nevertheless the gross working profits have increased from 222,000,000 marks in 1883 to 548,000,000 marks in 1908; so far, the maximum obtained was, in 1906, namely 698,000,000 marks.

"These extraordinary working profits, which in the aggregate amount since the nationalization of the railways to a total of nearly 12,000,000,000 marks, have greatly benefited the Prussian State Railways. They enabled them to meet nearly the whole of the cost of construction of existing railways out of current revenue. In fact, one may say that all expenses necessary for the maintenance and preservation of railway property have been met out of current revenue. This continual capitalization of the net profits has rendered unnecessary any writing off to make due provision for the maintenance of the property. The present aggregate value of the Prussian State Railways not only equals, but exceeds the whole amount of capital taken up on loan by the Prussian State for the purchase and development of the railway system. When, nevertheless, a redemption of the loan has taken place, and will be further increased in the future, that is done not for the preservation, but for the augmentation of capital. In contrast to the overcapitalization of many foreign railways, the object aimed at and achieved has been the undercapitalization of the Prussian State Railways. This is the solid foundation on which the Prussian railway finance is based.

"But this does not exhaust the financial success of the Prussian State Railways. Although, as has been pointed out, it was by no means the original

intention, railways have nevertheless become, under the combined influence of the above-mentioned factors, a considerable source of revenue to the State. A total of nearly 3,000,000,000 marks has been placed at the disposal of the Prussian Government for other State purposes out of the surplus of the railways. It is true that in consequence of the varying conditions of trade the figures are liable to great fluctuations, and therefore involve certain risks to the State, which have not always been met effectively by the Prussian financial administration, but this does not detract from the momentous advantage that, thanks to its railways, the Prussian State was in a position to participate financially at once in the great rise of prosperity in German industrial life. Hence, the fact, that Prussian finance presents, on the whole, such favorable conditions, is largely due to the Prussian State Railways."

The railways of the other states are likewise profitable, although, with the exception of Saxony and Bavaria, these states contain comparatively few cities and relatively little industry. In 1911 the Bavarian railroads earned 4.5 per cent. on the outstanding loans; Saxony, 5.4 per cent.; Würtemberg, 3.4 per cent.; and Baden, 3.8 per cent.¹

The proportion of the state income derived (1) from the railroads, (2) from other state-owned property, and (3) from taxes in the more important states is indicated by the following table:²

¹ Dawson, *Industrial Germany*, p. 55.

² *Statistisches Jahrbuch*, 1913, p. 345.

STATE	FROM RAILROADS	OTHER STATE- OWNED PROP- ERTIES AND OTHER SOURCES OF STATE IN- COME	TOTAL TAX RE- CEIPTS
	<i>Marks</i>	<i>Marks</i>	<i>Marks</i>
Prussia.....	539,954,000	118,000,000	495,763,000
Saxony.....	44,608,000	15,020,000	90,890,000
Württemberg...	21,281,000	21,319,000	54,633,000
Baden.....	29,889,000	5,479,000	57,009,000

From the above it appears that 57 per cent. of the income of Prussia is derived from productive industries owned by the state, and 46 per cent. from the railways alone. In Saxony, 29 per cent. of the revenue of the state comes from the railways, in Württemberg, 22 per cent., and in Baden, 32 per cent. When it is considered that the income taxes are the largest single source of state and local taxation, it is easy to understand the universal approval of public ownership even in a country as completely governed by the landed and capitalist classes as is Germany.

But the financial success of the railways, remarkable as it is, is of secondary importance. "I do not regard railways," said Bismarck, "as in the main intent, to be the object of financial competition; according to my view, railways are intended more for the service of traffic than of finance, though it would, of course, be foolish to say that they should not bring financial advantages."

It is difficult to overstate the extent to which the

railways have contributed to the upbuilding of Germany. The casual traveller sees but little of this, the reports only scantily suggest it, and the mere statement that the underlying motive of operation is service, conveys but little idea of the extent to which the industrial and social development of the country has been promoted through the railways. The very life of the nation is, in fact, woven into the transportation agencies, which are not operated as a separate, detached thing, but are related to every need of the empire and are consciously administered to serve its destiny.

"German railroads," says an English observer, "have largely contributed to the prosperity of German industry; the British railways have largely contributed to the decay of British industries. In Germany trade policy is made by trade; in Great Britain it is made by the railroads, which, without consulting the trade, prescribe its course, stimulating it here and stifling it there."¹

Such struggles, as almost every American city has experienced in order to secure even tolerable terminal facilities, betterments, or service, are inconceivable in Germany. In place of hostility and conflict, the state anticipates industrial and municipal needs. The harbors and water-fronts are operated in closest harmony with the railway terminals, which are planned as a co-operating unit in

¹ Eltzbacher, *Contemporary Review*, February, 1905.

the industrial programme. Great factory areas are laid out with sidings and switches. The approaches to cities are not disfigured with unsightly cuts and surroundings; rather they are sodded and parked and made as unobtrusive as possible. The stations of cities like Frankfort, Cologne, Dresden, and Hamburg, are of splendid architecture, with artistic overhead approaches which disfigure but little the beauty of the city. Frankfort, a town of 400,000 people, has a station erected many years ago at a cost of \$10,000,000, when Frankfort was a small town. There are no grade crossings. The tracks are raised or depressed as necessity requires. Everything is built for permanence and with provision for safety. There are very few accidents. "German railway trains arrive nineteen times out of twenty to the minute because the government punishes severely those responsible for the delay."¹

New lines are built when needed, even if they are not profitable, for the convenience of the people or the upbuilding of an industry or a territory. Nor do localities or industries interfere unduly with the administration in their efforts to secure favors or special privileges. This is checked by the active participation of representatives of chambers of commerce and agricultural bodies in the actual administration of the system.

Under private operation the companies showed

¹ J. Ellis Barker, *Modern Germany*, p. 460.

a tendency to give low rates on foreign goods destined to inland points because of the competition of the waterways. This policy was reversed by the state, and where discriminations are now made, they are in favor of German rather than foreign shippers. In order to attract trade to German sea-ports, low rates are granted on goods from Hungary or Russia, passing through Germany and destined for England. The nearest and most natural ports for the busy manufacturing districts of Westphalia are those of Rotterdam and Antwerp, and if railway rates were fixed solely by distance, Hamburg and Bremen would find difficulty in competing with the Dutch and Belgian ports, so far as the traffic of Westphalia is concerned. The result would be a loss of business both to the German railways and German ports to the benefit of foreign railways and foreign ports. In order to prevent this the "Prussian railways concede exceptionally low rates from various manufacturing centres in Germany, and especially in the Rhine district, for goods conveyed to Hamburg and Bremen."¹

These examples are indicative of the studied co-operation of the railways with industry. Several years ago, when there was a poor fruit harvest in Holland, German fruit-growers sent large quantities of fruit to Dutch preserve makers, being helped to do so by the exceptionally low rates on the Prussian

¹ Pratt, *Railways and Nationalization* p. 262.

railways to the Dutch frontier. The next year fruit was plentiful in Holland, but scarce in Germany, and the Dutch traders expected to profit by the low rates of the year before. Instead, they found the rates raised to a prohibitive point to protect the German traders.¹ During the industrial depression in 1908, the railways lowered freight tariffs 64 per cent. in order to encourage export trade which was suffering with that of other countries.²

In the same way export trade is fostered by lower rates on goods destined for abroad than for home consumption. In general, the rate on goods for export is as low proportionately for *parcels* as it is for carload lots shipped from one part of the country to another. The following table illustrates this difference, with regard to a few representative lines of goods:³

	IN 10-TON LOTS PER METRIC TON	
	EXPORT RATE	NORMAL RATE
Cotton goods, Cologne to Hamburg.....	\$3.64	\$6.38
Toys, Nuremberg to Hamburg..	5.83	9.33
Machinery and machine parts, Cologne to Hamburg.....	2.53	4.86

In many cases, special rates are made to encourage a new industry. For instance, a man finds sand which he thinks suitable to the manufacture of glass.

¹ Pratt, *supra*.

² British Consular Reports, 1899.

³ E. Roberts, *Scribner's Magazine*, February, 1911.

He desires to start a manufacturing plant, provided he can secure the necessary combination of chemicals, coal, etc. He first places the matter before the local Chamber of Commerce, which in Germany is a semiofficial organization. If the proposal meets with approval, a recommendation is made to the railway authorities for special rates, who make a fresh examination, and if they approve a special rate is granted. In this manner the industry of the Siegerland district is stimulated by a reduction in the rate on ore to the Ruhr and Aix-la-Chapelle districts and in the rates for the conveyance of fuel needed by the Siegerland iron industry. In the same way the disadvantage of the inland position of Lorraine is minimized by special railway rates.¹ In fact, 66 per cent. of all the freight carried on the German railways is taken under exceptional rates, designed in almost all cases to meet some industrial need.² Mr. Elmer Roberts states:

“All the devices (rebates, special rates, etc.) so passionately hated here (U. S.) are applied there, but with this difference—that while in America these devices are suggested, even necessitated by the war of interests or the will of the individual managers, they are applied in Germany according to principles of equity which take into account industry, trade and agriculture as a national whole, granting exceptions, taking one sort of traffic as privileged, another as normal, upon calculations

¹ Dawson, *Industrial Germany*, p. 58.

² Roberts, *Monarchical Socialism in Germany*, p. 31.

wide enough to include the interests of the whole people.”¹

The Prussian minister of public works stated in the lower house in April, 1912:

“I intend to be always in the first place a Minister of Communications, though, at the same time I must as a minister take account of the financial well-being of the state. Like Bismarck, I regard the railways as primarily a transport institution and not as a milch cow, and I shall never administer my department in a purely fiscal spirit.”²

Secret discriminations between individuals or corporations seem to be unknown in Germany. Neither is one city developed at the expense of another, except in so far as it is to the advantage of the whole community to grant special privileges for the development of trade or commerce. The Prussian Cabinet made the following statement in 1879 upon this subject:

“The granting of these secret advantages in the most diversified ways to individual shippers, and in particular the so-called rebate system, is the most injurious misuse of powers granted to railroad corporations. It renders government control of rates impossible, makes competition between different lines, as well as that of the shippers dependent upon them, dishonorable and unfair, carries corruption among the railroad employees, and leads more and

¹ Roberts, “German Railway Policy,” *Scribner's Magazine*, February, 1911.

² Dawson, *Industrial Germany*, p. 56.

more to the subordination of the railroad management to the special interests of certain powerful cliques. It is the duty of the government to oppose this evil, to uphold the principle of the equal treatment of all shippers, and to enforce the legislative regulations on this subject. The importance of this problem is only equalled by the difficulty of its solution."¹

Many special services are performed to aid shippers. For instance, the railways undertake to be responsible for the delivery of a shipment, so that when the consignor has paid the freight, he need have no more worry about the goods than if he had sent a stamped letter through the mails. The railway also obtains for the shipper a bill of lading when the goods are placed aboard the steamer, on which he may receive his money.²

Easily understandable tariff rate-books for combined rail and sea routes are prepared by the railway authorities. They are so simple that any layman can understand them and so complete and accurate that the merchant can tell the exact price of shipment of any kind of goods from his city to any part of the world.³

Nor have the financial gains of the state led to indifference to improvements. "Reduction of freights and the growth of profits have not been at

¹ Frank Parsons, *The Heart of the Railroad Problem*, p. 316.

² Roberts, "German Railway Policy," *Scribner's Magazine*, February, 1911.

³ Roberts, *Monarchical Socialism*, p. 26.

the expense of technical improvements. In the matter of size of cars, tunnels, terminal facilities, introduction of steel cars, etc., the state railways of Prussia are making greater progress than other railways of Europe. Better equipment and improved terminal arrangements are being introduced side by side with the reduction of rates and increased profits. Where the traffic is dense, special depots for particular freight are provided, instances of which are the cattle depot and fuel depot of Berlin. The block system is almost universal."¹ Despite these services, traders are continually complaining that the government is making too much money out of the railroads instead of forwarding goods faster, providing more trains, etc.

All railroad employees are in the civil service. There are no political appointments or favoritism. The higher officials are required to have a university or technical school education before they may even take an examination for the service. Engineers must have had a thorough technical education and must have practised their profession for eight or ten years in private employment, before they are qualified to take the second examinations required by the state.²

Prussia and some of the other states are preparing plans for the electrification of the railroads. The

¹ Vrooman, *American Railway Problems in the Light of European Experience*, p. 122.

² Vrooman, *supra*, p. 273.

former state has already electrified a portion of the line from Magdeburg to Halle. Power is produced at a central station erected near the coal-mines, and the government has made a contract for cheap power for thirty years. The improvement has proved so successful that the government is now about to electrify 160 miles of railway in the Silesian hills district. The states of Saxony and Bavaria are likewise planning to electrify some of their lines. The Saxon government has bought coal-mines at a cost of \$11,500,000 with the object of having at its command an abundance of cheap fuel.

The policy of service is followed in passenger as well as freight rates. Low rates are made from the cities to the suburbs. Cheap transportation is also offered on Sundays and holidays in order to carry the people to the country. Excursion trains run third and fourth class coaches which are filled to overflowing with men, women, and their families bound on a holiday. The railways are used far more generally in Germany than in the United States. People ride more frequently and on the whole more universally, despite the higher standard of life in this country. In 1901 the passenger traffic per kilometre was 413,820 in Germany, as compared with 89,721 in the United States. The average income per mile per person of the railways was \$.0103 in the former country and \$.0206 in the latter. In other words, the average fare per mile in America

was exactly twice what it was in Germany. The *average* ton-mile freight rates, however, are nearly reversed, the rate on freight traffic per ton per mile in Germany being \$.013 and in the United States \$.0076. It is difficult, however, to draw conclusions as to the relative cost to the shipper or the public in the two countries, because so large a part of the railway freight traffic in America is made up of raw materials, like coal, iron ore, lumber and building materials, and foodstuffs, which in Germany are transported by water at a very low rate. A fairer comparison would be by classified articles.

It is repeatedly urged by American railways that the average freight rate in this country per ton mile is very much lower than in Europe, and that while the earnings of our railways in 1910 averaged \$10,769.40 per mile, if the European rate had been charged, they would have been \$14,580 per mile.¹ And it is constantly asserted that the ton-mile rates in this country are but half what they are in Germany.

Again it is impossible to accept any single factor in making comparisons of transportation costs. There are scores of elements which must be taken into consideration, such as switching and forwarding charges, demurrage, and the like. As against these debatable comparisons is the fact that the total traffic earnings of the American railways in 1911

¹ B. S. Winchell, *Atlantic Monthly*, December, 1912.

(exclusive of passenger traffic) was \$2,168,000,000, or \$23.35 per capita, or \$116.75 per family of five persons. During the same year the total freight earnings of the German railways were \$516,303,000, or \$8 per capita, or \$40 per family of five persons. This is the relative burden of railway freight charges in the two countries. In Germany, freight transportation costs each person about one-third as much as it costs the average American, despite the alleged lower ton-mile charges in this country. In addition, it should be borne in mind that the German railways contribute \$160,000,000 a year in profits which are used for the relief of taxation, which is included in the traffic burden of the German consumer. As against this, however, there should be deducted the taxes paid by the American railways to the State and National Government which taxes are not paid in Germany.

This but indicates the difficulty of arriving at any exact basis for the comparison of freight rates in the two countries. There are so many factors involved that are not included in the comparison. It may at least be claimed for the German system that all of the earnings go to the state in some form or other. There are no watered securities, no favored contractors, no semicriminal financing, and no attempt to exploit an industry or a community for the benefit of stockholders.

I have travelled many thousand miles on the

German railways during the past twenty years and never, so far as I can remember, were the trains more than a few minutes late upon arrival or departure and I have always been able to secure a seat. The average rate of fare for a second-class ticket, which is a better service than the ordinary coach in America, is 1.8 cents, while the third-class tickets average 1.1 cent a mile. The first-class rate is 2.5 cents a mile. An additional charge is made on express-trains which range from 6 cents to 50 cents, depending on the distance and the class in which the person travels.

The head of the state railways in Prussia is the minister of public works, a permanent salaried official appointed by the King. The principal supervisory authorities are the Bundesrat, or Imperial Senate, and the Reicheisenbahn Amt, the members of which are appointed by the Emperor. The latter body exercises general supervision over the entire system and sees that the various regulations and enactments are carried out.

In spite of the fact that the railways are owned by the individual states the administration is under imperial control. There is no conflict between the various states.

"The Constitution of 1871 provided for uniform operation of the railways as part of a co-ordinated system. That instrument specially reserved to the Empire the right to exercise supervision over all

the railways and legislate regarding them in the twofold interest of national defense and general traffic facilities. The Federal Governments are required to administer the railways of the country as a uniform system in the interest of the general convenience and in furtherance of this idea to construct new lines when necessary. Provision is also made for the interchange of through traffic and to this end for the interchange of rolling stock. The central government may construct or authorize the construction of new railways in any federal state, even against its will, and it may even exercise the right of expropriation.

"Before nationalization there were 600 different sets of rates without counting preferential rates applying to special cases. After long negotiations the several state administrations have agreed upon the rate question, and since 1910 rates for passengers have been uniform and those for goods virtually so."¹

In railway matters the Bundesrat, or Senate of the empire, acts under general instructions agreed upon by the federated governments, and the motives of operation agreed upon, are as follows:

- (1) To assist internal industry and agriculture by cheapening the cost of raw materials or equipment for production.

- (2) To facilitate export of German products.

- (3) To support the trade of German commercial centres.

- (4) To favor German railways against competing foreign waterways and railways.²

¹ Dawson, *Industrial Germany*, p. 46.

² E. Roberts, "German Railway Policy," *Scribner's Magazine*, February, 1911.

General railway conferences are called from time to time by the Bundesrat, in which the various systems have votes according to their respective mileage, there being 1 vote for a railroad of from 31 to 93 miles; 2 votes from 93 to 186 miles, etc. A permanent rate commission prepares the business for the conference. There is a subdivision of membership called the traders' committee, consisting of five representatives of agriculture, five of manufacturing interests, and five of distributing and commercial interests. These are elected by the chambers of commerce and the boards of agriculture of the country, and these fifteen, together with a member from the Bavarian government, recommend to the permanent commission authoritatively "any adjustment of rates equitably among the zones of traffic into which the empire is apportioned, so that a shipper in one part of the country shall not be at a disadvantage in internal trade through his geographical location."¹

The central railway office organizes and controls the rolling stock and equipment of the railways and serves as a centre for administration, from which technical improvements are initiated, weighed, and, when approved, are pressed on the railway administrations of the various states. There is also a series of district advisory councils, or committees, composed of representatives of the great economic interests. For the rest, each state manages its own

¹ E. Roberts, *Scribner's Magazine*, February, 1911.

lines and, as far as possible, regulates its policy according to what it considers the best interests of its own population and territory.¹

So far as the shipper is concerned, the railways of Germany are all one system. There is no struggle for traffic, no conflict over territory, no dispute with the state. "It is a striking fact," says Dawson, "that at present over 31,000 miles (in 1907) of railways (either railways belonging to the state or private lines managed by the state, though mostly the former), representing over six hundred million pounds of invested capital, are working with perfect smoothness and success without the aid of boards of directors, private capitalists, meetings of shareholders, who, as a consequence, are able to employ their activities in other and more advantageous ways."²

Even an exhaustive enumeration of the service activities of the German railways gives but a partial idea of the extent to which they contribute to the industrial life of the nation. The railways are an integral part of the empire. This is the most important thing. They function as part of its life just as do the roads and highways, just as does the circulatory system of the human body. In place of a conflict with the nation, the states, and the cities over every possible question, the railways anticipate the needs of the community and provide for them.

¹ Dawson, *Industrial Germany*, p. 53.

² Dawson, *Evolution of Modern Germany*, p. 208.

Where differences of opinion arise, the adjustment is on the basis of the public interest, the questions involved being discussed from this point of view alone. Instead of a struggle on the part of stockholders and directors to secure the maximum of profits or dividends, the struggle of the state officials and chambers of commerce is to secure the maximum of service, either in accommodation to the public or in profits to the state. There is thus a unity of purpose, the only debated questions being those of state policy.

Another advantage arising from state ownership is the divorce of the railways from politics. There are no stockholders, directors, or attorneys in the Reichstag, the legislatures of the states, or the councils of the cities. They make no campaign contributions and are not influential with the press. They carry on no publicity bureaus and maintain no expensive lobby. Railway legislation is considered with an eye single to the public service. This is a great gain, possibly the greatest gain of all. That Germany is not inherently free from the activity of private interests in politics is seen from the influence of the agrarian or Junker class in Prussia and the empire. It is seen to a lesser degree in the class legislation of the big taxpayers and house owners of the cities. The general honesty and disinterestedness of the German official is not alone attributable to the traditions of the country. It is found as well

in the fact that much of the privileged wealth which in this country is in private hands is owned in Germany by the state. This of itself has excluded corrupt influences from public life and in so doing has purified the source from which much of the corruption in America has come.

CHAPTER VIII

CANALS, WATERWAYS, AND FREE PORTS

WATERWAY development, as a means of cheapening freights and the development of inland centres, has gone hand in hand with the extension of the railways, and in recent years the waterways have been receiving the greatest attention. This is remarkable in view of the immense profits which the state receives from the operation of the railways, which profits have undoubtedly been materially reduced by water competition.

The programme of waterway development has been thought out for many years to come and on a most elaborate scale. It includes the linking up of all the great ports of ocean entry with the rivers and inland centres by ship canals and river systems, capable of carrying very heavy traffic. In addition, splendid harbors have been built along the Rhine, and on the North and Baltic Seas, with free ports at Hamburg, Bremen, and Lübeck. A network of canals is to unite the Rhine, the Danube, the Oder, the Weser, and the Meuse of sufficient dimensions to carry large craft. Already the register of canal-boats has been raised from 150 to 600 tons. Transportation by canals and rivers is closely integrated

with the railways through splendidly equipped terminals, which facilitate the easy transshipment of freight from one to the other, while the larger towns on the rivers and ocean harbors have built the most completely equipped docks and warehouses for the development of trade and industry.¹

Cheap water transportation is another explanation of Germany's industrial progress. It has been planned with the same far-seeing intelligence that characterized the railway system, with which it is closely related in its administration. Some idea of the magnitude of the water traffic is evidenced by the fact that while the total goods carried in 1911 upon the railways aggregated 408,879,000 tons, the goods upon the waterways totalled 76,632,000 tons, or more than one-sixth of the amount carried by rail. The total navigable waterways in the empire amount to 8,600 miles, one-fourth of which, or 2,200 miles, are in canals or canalized streams. During twenty-five years Prussia alone has spent \$250,000,000 on canal undertakings.

A comprehensive imperial waterway programme was authorized in 1905. It includes two great undertakings: one, the Rhine-Weser project for a canal to connect the former river with the Dortmund-Ems Canal, from the latter to the Weser, the enlargement of other canals, and the canalization of the river Lippe, the estimated cost of which was \$62,687,-

¹ See chapter IX.

500. The second, the Oder project, includes the building of a ship canal from Berlin to Stettin, at a cost of \$10,750,000; improvements in the waterways from the Oder to the Vistula, at a cost of \$5,290,000; connections with Breslau, costing \$4,937,500; and various other plans. The total estimated cost of these two undertakings is \$83,750,000, which sum, however, will be greatly exceeded.

When these projects are completed, the Rhine will be connected with the Weser in the east, the Danube in the south, and the Meuse in the west. The rivers Elbe, Oder, and Vistula are already connected, and the canal now being built from the Rhine to Hanover will probably be continued to the Elbe.

Other proposed waterways are a canal from the Neckar to the Danube, to cost \$27,500,000, and a 64-mile canal from the Danube at Ulm to Lake Constance, to cost \$20,000,000. There are great engineering difficulties in these projects, in the first case a difference in level of 900 feet, and in the second 540 feet, but these will be overcome. One of the most colossal undertakings proposed is the opening of the river Rhine to the sea in German territory. The Rhine now enters the North Sea in Holland, and an enormous amount of German traffic is handled at Rotterdam and Amsterdam, which it is desired to divert to German seaports. An influential association has actively promoted this idea.

The most notable features in the act of 1905, authorizing the Rhine-Weser and Oder projects, are the wide powers of expropriation of adjoining land reserved to the government and the provision for a state monopoly of the towing service on the Rhine-Weser Canal and its branches.

In view of the improvements in transit facilities on the main rivers (Rhine, Oder, Weser) and some of their tributaries, the Agrarian party, which has opposed waterway development because of fear of agricultural competition, insisted that dues be paid "on rivers regulated in the interest of navigation." Prussia promised this amendment without consulting the other states, although it involved an alteration in the constitution, which expressly prohibits dues on the natural waterways of the country. But the constitution was changed and the other states were induced to acquiesce, Bavaria, for example, by the promised canalization of the Main. The plans include a river board for each river, upon which all the principal interests concerned should be represented, and the dues to be charged were to be uniform on all the rivers. The government claims the purpose of the dues is not to earn surpluses for the state, but to cover actual costs by an "inconsiderable addition to freightage rates."

In the construction of these great canal projects "rivers are crossed, ascents and descents of hundreds of feet are made with facility, and ships lifted

and lowered bodily in troughs instead of by the old and slow method of locks.”¹

So comprehensive is the waterway development that goods can be sent from the mouth of the Rhine direct into Switzerland and the south of France in one direction, and to Würtemberg, Bavaria, and Austria in another. Merchandise bought in Hamburg can be despatched by river and canal every yard of the way from that port to Berlin, or even to Silesia in the extreme south of Prussia. The canals have made Berlin, 400 miles from the sea, a great port, second only to the North Sea ports, and three cities on the Rhine. Before long, Berlin will be in touch with the Rhine in the far west and the Danube in the south. Berlin's in and out traffic in 1910 amounted to 5,750,000 tons, to which should be added the traffic of the suburban towns, exceeding 3,000,000 tons. Between Berlin and all the important towns accessible by river and canal regular sailings are arranged; *e. g.*, between Berlin and Hamburg and Breslau there are several sailings a day including, at least, one express boat.

The importance of the national waterways is shown in the following table:

GOODS CARRIED IN 1911—IN TONS

	TOTAL	HOME TRADE	FOREIGN TRADE
Waterways.....	76,632,000	43,304,000	34,328,000
Railways.....	408,879,000	346,420,000	53,870,000

¹ Dawson, *Industrial Germany*, p. 68.

The cost of shipping a ton of corn from Hamburg to Berlin by water is about one-sixth as much as by rail.

The Berlin-Stettin Canal was opened on June 20, 1914, in the presence of the Kaiser. It has 40 bridges, one of which carries the canal over the Stettin railway, and 4 locks, rising altogether 120 feet, and each lock capable of taking two vessels of 600 tons simultaneously. Later a ship trough hoist will be added if the traffic justifies the expense. This new waterway is planned to raise Stettin to a position on the Baltic comparable to that of the harbors of Hamburg and Bremen on the North Sea. The canal involves an investment of \$12,500,000, and it is estimated that 3,000,000 tons of freight per annum will be shipped through it.

The waterways are used for the handling of heavy bulk freight, such as coal, iron ore, lumber, grain, and the heavier articles of commerce, whose immediate delivery is not important. On these commodities very low rates are charged. And this is one reason why the railway freight rates in Germany are higher than in this country. For the waterways carry one-sixth as much freight as do the railways. Were the heavy bulk freight, which goes by water, subtracted from the freight by rail in America, and a comparison made of similar commodities, it might be found that freight rates by commodities were as low in Germany as they are in America.

The canals and navigable rivers are operated in

connection with the railways, which are further operated in connection with the docks and harbors in which every provision is made for the cheap and easy transshipment of freight from one to the other. There is no conflict between water and rail transportation; no conflict between the public and private owners over the possession of the water-front. All of these agencies are operated together as a unit, for the promotion of the domestic and foreign trade of the empire. They are all part of a co-ordinated whole.

The free ports of Hamburg, Bremen, and Lübeck complete the transportation system of the empire. They have profoundly aided the growth of the merchant marine. They provide cargoes and make these ports great clearing-houses for the trade of the world. The cities of Hamburg, Bremen, and Lübeck are among the oldest of the free cities of Germany. They controlled the Hanseatic League, which in turn controlled the trade of the north for centuries. They carried on wars of offense and defense. They came into the empire as independent states and later secured concessions which enabled them to retain a portion of their ancient trading advantages by grants of authority to maintain free ports within their harbors.

German statesmen realized that the carrying trade of the world is performed by those countries that have substantially free trade. They recognized

that water transportation will go hundreds of miles to escape tariff barriers. The protective tariff killed the Spanish trade; it destroyed the rich and prosperous cities of the Netherlands. The abolition of the Corn Laws by England opened up the ports of that country when the ports of all the rest of the world were closed, and brought to her cities the carrying trade which had previously been distributed among many nations. And for fifty years England has been mistress of the seas for the very simple reason that ships could come to her ports without the payment of customs taxes; they could discharge their cargoes and find other cargoes awaiting them without delay. There were no obstacles, obstructions, or tariff barriers of any kind to interfere with traffic. It is this that has built up her carrying trade during the last fifty years. Her ports are counters, or market-places, for the making of a million transactions and the distribution of the most diversified products of every clime. And to-day the carrying trade of the world is performed by those countries that have free trade, or an approximation of free-trade conditions. They are England, the free ports of Germany, and the ocean ports of Belgium, Holland, and Denmark, which are low-tariff countries. The bulk of the carrying trade is done by Great Britain and the German ports. Goods are brought to these ports from America, the Continent of Europe, from Asia, the Indies, Africa,

South America, and the islands of the seas, where they are entered for consumption or manufacture, or reassembled for distribution again to the places of ultimate purchase.

A description of the free port of Hamburg indicates the operation of the system. The free port consists of a large number of basins, many of them cut into the land, with quays jutting out into the river. Upon these quays are railroad tracks with cranes for the easy transfer of freight into the nearby sheds. In the larger outside basins are many mooring posts which provide anchorage for vessels transshipping cargoes in the stream. A number of warehouses are operated by the authorities as a part of the port. Goods are stored in the warehouses for re-export or for ultimate consignment into Germany or other countries of Europe.

The free port is considered as foreign territory by the Customs Department. It is surrounded by a customs line, guarded by customs officials. The line is designated by high iron palings along the land side; and along the river is a floating palisade guarded at either end by customs officials. At the land and water entrances of the free port are customs booths at which duty is paid on goods when they enter the harbor proper.

All of the harbor pilots are *ex officio* customs inspectors. Under their guidance ships pass to their berths in the free port unmolested by customs

officials. There are no declarations of dutiable goods to be made; no customs officials are taken aboard with the delays attendant upon their presence. When a ship is cargoes ready for sea, a customs pilot takes her to the mouth of the river. There is less hindrance to the free movement of the ship within the free port than in the ports of England.

The free port contains a number of industries incident to the care and feeding of employees, shipyards for repairs, and other industries relating to the outfitting and provisioning of ships. Big river barges of from 600 to 800 tons capacity move from ship to ship for the transshipment of freight.

The free port is controlled by public authorities, although it is partially privately operated by the warehousing company which has erected warehouses upon public lands.

A number of means have been devised to facilitate the care and handling of goods. Goods to be imported pay duty on the spot; or the importer may have a running account against a deposit made by him in the form of government bonds. Provision is also made so that goods may be shipped with a customs certificate to the inland consignee, who pays the duty on delivery. Similar procedure is provided for goods forwarded in transit through Germany to other countries.

By reason of the free port, as well as the industrial development of Germany, Hamburg has become

the second seaport in the world. It does more business than London or Liverpool, and is a close second to New York. The total foreign commerce of the port is just short of \$2,000,000,000. It exceeds that of London by \$100,000,000 and far exceeds Liverpool in imports.

Students of Germany are in agreement as to the value of the free port as an agency in the country's development. Mr. Edwin J. Clapp in his treatise on the free port of Hamburg says:

"The first advantage of the free port is in facilitating re-exportation; indeed the importance of the re-exportation trade is large and, above all else, led to its creation. In the free port foreign merchants can maintain sample or consignment stocks. Bonded warehouses do not offer the same opportunity for unhindered movement of merchandise within a port. Everything must be done under the control of customs men. In Hamburg there is no need of counting and verifying pieces when a re-exportation is made. A bonded warehouse cannot offer the same facilities for various manipulations necessary to prepare the goods for the consumer, such as cutting wines and mixing coffees.

"Perhaps, the chief advantage of the free port lies in the facilities it offers for the rapid frictionless discharge of ships with dutiable goods, whether destined for re-exportation or shipment inland.

"The free port of Hamburg lets the Hamburg merchants store their goods duty free, and offers them complete freedom of manipulation for re-exporting them or for sending them inland, as the market dictates."

The free port is one of many marvellous adjustments which Germany has made to overcome natural or artificial limitations on her growth. It is indicative of the far-seeing intelligence bestowed upon the laws of trade. Through it many of the advantages of free trade are secured without sacrifice of the protective-tariff policy. By means of it, the merchandise of the whole world can be brought to German ports and there be warehoused for an indefinite period, or it can be reshipped into other bottoms awaiting cargoes to some other port. Or the merchandise can be exhibited in sample for purchase by inland buyers. The free port creates a world terminal, a world market, a world clearing-house, the basis of shipping, of international trade and finance, and a great aid to domestic industry as well.

CHAPTER IX

HARBORS AND RIVER SHIPPING

A THIRD important factor in the elaborate transportation system of Germany is the water terminal or harbor, with its docks, warehouses, and means for the transshipment, forwarding, and housing of freight. Adequate terminal facilities are only secondary in importance to the means of transportation. Only recently has this been appreciated in any country. Belgium has built deep waterway canals to her inland cities with splendid dockage and harbor facilities, while Manchester, England, has built a ship canal to the sea with a complete inland harbor, all under public control. Germany has constructed the most remarkable water terminals of any country. Tens, possibly hundreds, of millions of dollars have been spent upon them. They are designed by the best of engineers and are encouraged by the state authorities. The harbor is far more than a deepened waterway with projecting piers for the docking of boats. It is a completely equipped water and rail terminal, with railway connections, sidings, and switches, with great cranes, warehouses of all kinds, and an industrial district close by, suited to the development

of industries which require close connections with transportation facilities. Such water terminals are to be found wherever natural advantages or the ingenuity of the engineer could justify the expenditure.

The Rhine cities have been largely built up by the wonderful harbors, which are to be found from the boundary of Holland to the headwaters of navigation. From Mannheim, the head of big navigation,¹ down to Emmerich on the Dutch frontier, cities have spent immense sums on the development of their harbors. There is keen rivalry between these cities, each of which tries to attract to itself as much of the Rhine traffic as possible and in addition secure its raw materials and breadstuffs cheaply as well as a cheap export route. "Each of the cities wanted to gain for its forwarders the transfer between rail and water for the largest possible terri-

¹ The building of the Baden railway line (1846) from Mannheim to Basle killed at a blow the Rhine shipping above Mannheim. This could the more easily be done because above Mannheim the river is more shallow and dangerous and traffic upon it paid higher rates than below that point.

The lower Rhine was at first also hard hit by the railroads when these showed themselves capable of carrying "merchandise as well as merchants." Here the traffic revived, however, and has indeed steadily grown, due in large measure to the preponderance of bulk-goods traffic, which was then just beginning to take an important place in German exports and imports. In 1840, for instance, we find cane-sugar and coffee the chief articles going up-stream. In 1907 the chief articles were iron ore (38.3 per cent. of the total); English coal (11.4 per cent. of the total); and wheat (10.5 per cent.). The chief articles going down-stream in 1840 were coal, 37 per cent., and oak and pine, 16.3 per cent. In 1907 they were German coal, 48.8 per cent.; sand, gravel, etc., 15.3 per cent.; manufactured iron, 10.9 per cent. In the changed traffic only coal has held its place.—Clapp, *The Navigable Rhine*, p. 34.

tory, to win for its warehouses and silos the widest possible dominion."¹ The harbor and harbor facilities are not operated as a source of direct profit. Charges are low and usually go toward expenses of upkeep. Düsseldorf has spent 18 million marks on her harbor and operates it at a yearly loss of 400,000 marks. "Yet Düsseldorf thrives and is the envy of the older commercial and industrial cities on the Rhine; Düsseldorf is able to look beyond the immediate receipts of a tax on traffic."²

A first-class harbor must have sufficient water area for many boats to load and unload at the same time and move about without disturbing one another. The harbor area is usually provided with many basins separated by tongues of land bearing railroad tracks, often double, so that cars can be loaded and switched without loss of time. Quay walls are usually built perpendicular, so that boats can come close in within reach of the cranes.

Close by the harbor, and operated in connection with it, many cities have provided an industrial harbor, *Industriehafen*, containing sites for industrial concerns. These, too, are owned by the cities, the sites being sold or leased on easy terms. These sites are particularly advantageous for concerns receiving barge loads of raw materials. At first it was the iron industry, then the chemical, that settled in these harbors, both of which were depen-

¹ Clapp, p. 53.

² *Idem*, p. 121.

dent upon the Rhine traffic. But later the cheap water rates attracted a great variety of industries to these harbors. All sorts of industries are to be found in the Mannheim industrial harbor "from steam flour mills to a mirror factory." The harbor and adjacent industrial district are situated a considerable distance from the residence section, which does not suffer in consequence from the smoke of the factory chimneys.

"The harbor is administered as a unit by the city that built it, not with the purpose of making money or even expenses out of it, but with the purpose of so cheapening transfer between boat and rail that a great hinterland can send and receive goods over the river port. Freight-handling machinery, such as cranes for package freight and cantilever hoists for coal, facilitate and cheapen the transfer of freight. Substantial sheds, warehouses and elevators on the river bank shelter the goods and ship them inland by rail. Railway tracks connect directly with the sheds and warehouses, as with the quay wall alongside which the vessels lie." ¹

The largest harbor on the Rhine is the Duisburg-Ruhrort harbor, which is really a harbor group. The harbor at Ruhrort, which belongs to the state of Prussia, is the most important member of the group. Ruhrort, from its vicinity to the coal-fields, was destined to be a coal harbor, and as soon as railway connections were made to the coal-fields it began

¹ Clapp, p. 120.

to take on importance as a transfer point for coal from railroad to river. It was equipped with coal tips for the rapid loading of coal onto the river boats. These tips can grasp twenty-ton cars and tip them till they empty their contents down a chute and into the waiting barge. At present the harbor possesses eleven of these tips, each capable of loading 2,000 tons in ten hours. Improvements in the harbor have been paid for out of harbor dues since 1868, when the Ruhr tolls were abolished.

The other members of the Duisburg-Ruhrort group are the municipal harbor of Duisburg and the railroad harbors at Hochfeld and Ruhrort, the two latter passing over to the state with the railways when the roads were transferred to state ownership. In 1905, as the result of an agreement between Duisburg and its rival Ruhrort, all the harbors of the group, except Hochfeld, came under the management of the administration of the Duisburg-Ruhrort harbors. In 1907 the water traffic of this harbor group was 31 million tons, as great as Hamburg's seaward traffic.

In the harbors of Mannheim and Ludwigshafen, on opposite sides of the river Rhine and at the head-water of big navigation, we have a group similar to that of Duisburg-Ruhrort. The two cities are directly opposite, Mannheim in Baden and Ludwigshafen in the Bavarian Palatinate, on the left bank of the river. This group, which includes also the harbor

of Rheinau, on the southern outskirts of Mannheim, has a total area of 500 acres and a river commerce of 10,000,000 tons (1907). The Mannheim harbor was built by the state of Baden (except the industrial harbor belonging to the city) and acts as a feeder for its railways. The state not only charges no dues in its harbor, but charges the lowest freight rates on goods transshipped at Mannheim. Mannheim has gained materially through its harbor. "In the five years 1899-1904, in spite of the bad times, Mannheim had through its industrial harbor increased its taxes by 6 million marks and its laboring population by 1,000 persons." Mannheim has a river traffic about twice the seaward traffic of Bremen.

Between Duisburg and Mannheim many other cities on the Rhine have built or modernized their harbors. Among them are Crefeld, Mühlheim, Cologne, Düsseldorf, Worms, and above Mannheim, Carlsruhe (which with its shipments of lumber from the Black Forest has become the chief lumber exporting city on the Rhine), Frankfort and Offenbach (on the Main), and Strasburg, to mention only the more important. The rivalry between these cities compels them to adopt the latest improvements in harbor equipment. This is why the Rhine harbors are the finest river harbors in the world.

Most of the goods traffic on the Rhine is up-stream, in the shape of foodstuffs or raw materials for industry. Many of the boats going up-stream loaded

come down empty. This means very low water rates for manufactures that can be exported over this route. The relation of Germany's imports to exports along the Rhine was 1 to 3 in 1840. In 1907 the proportion was $2\frac{1}{2}$ to 1. "The river has become the route that furnishes a great industrial nation cheaply with its raw products and foodstuffs," says Clapp.¹ Iron ore and grain form two-thirds of the imports up the Rhine. In 1907, 59 per cent. of Germany's imported iron ore came over the Rhine route; 64 per cent. of her imported wheat and spelt, and 45 per cent. of her rye. Only one-fourth of her exported coal, however, went down the Rhine, although coal forms one-half of the total goods sent down-stream.

In 1907 the total traffic on the Rhine amounted to 64.5 million tons, of which 41.4 million tons passed through German Rhine harbors. The traffic on the Rhine passing the German border station, Emmerich, increased 400 per cent. from 1885 to 1907. Most of this was moved up-stream (28.9 million tons). Two-thirds of the German Rhine traffic consists of exports and imports from foreign countries, and only one-third is internal traffic. The chief articles sent down-stream are manufactured iron, soda, salt, stone, sand, gravel, and brick. The discrepancy between the amounts of goods imported and exported on the Rhine is not so great, however, when we con-

¹ Clapp, *supra*, p. 48.

sider value rather than tonnage, as the down-stream traffic includes many manufactured articles.

The floating stock on the Rhine has been continually modernized. Barges now have a capacity of between 1,500 and 3,000 tons and are made of steel. Tugboats can usually pull up-stream a barge train of 6,000 tons. Great navigation companies of long standing and merit operate through lines from upper Rhine ports to the sea harbors, and have agents in important inland cities who collect and distribute freight transshipped between river and rail at Mannheim and other Rhine ports.¹

The harbor groups of Duisburg-Ruhrort and Mannheim handle between them 75 per cent. of the total traffic of the German Rhine ports, or about 31.4 million tons out of 41.4 million tons (1907). Duisburg-Ruhrort is the great bulk-goods harbor. Ninety per cent. of its traffic in 1907 consisted of iron ore, grain, and wood arriving; and coal, coke, pig and manufactured iron departing. The remaining 10 per cent. of its traffic is made up of sand, ore, cement, stone, and fertilizer. This is the doorway through which the Rhenish-Westphalian industrial district receives its raw materials and the grain for its workers, and through which it ships its products of coal, coke, and iron. The water traffic of Duisburg-Ruhrort has grown steadily and is now (1907) greater than that of any other German river harbor.

¹ Clapp, *supra*, p. 121.

Mannheim lies 354 miles up the river from Rotterdam. It is still the head of navigation for six months of the year. It serves a great territory, its hinterland extending far east into Baden, Würtemberg, Bavaria, western Tyrol, and Switzerland and west to the French border. The reason its influence does not extend farther into France is that the French government lays a special tax on goods received through a foreign harbor. Mannheim supplies these districts with coal, coke, grain, and petroleum. But more particularly, Mannheim is the piece-goods harbor, with a great diversity of traffic. Besides grain and raw materials, it receives valuable articles of consumption, such as coffee, fruit, wine and tobacco, and machines for factories. The threads of inland communication over the South German railways concentrate in Mannheim, which is the transfer point between cheap and expensive means of communication for large parts of South Germany and Switzerland.

The Mannheim harbor has received state support from the beginning and has been specially fortunate in its co-operation with the railways. Indeed the harbor of Mannheim itself (except the industrial harbor)—the oldest and most important of the group of harbors at this point—was built by the Baden state railways, which give their lowest rates to goods transshipped at Mannheim. These rates hold good not only for goods immediately sent forward

but also for goods stored in the warehouses, silos, and magazines, thus encouraging a large wholesale trade in the city. In the city itself is an industrial harbor, which Mannheim began to build in 1897 and completed six years later. It is about 1,500 metres long and has a maximum width of 300 metres. The sites in this harbor were immediately occupied, a considerable part of the city's chemical factories, as well as metal furniture and instrument factories, are situated upon it. These demand great quantities of coal and iron pyrites. They send a variety of products down-stream, which naturally has an effect in lowering the water rate up-stream. Simultaneously with the building of the "Industrie-hafen" went the laying out of a network of railway connections. More than 50 kilometres of track have been laid in the vicinity of the quays.¹

Ludwigshafen, opposite Mannheim, was similarly built by the railways of the Bavarian Palatinate "to give that city a chance in the great transshipment traffic at the head of navigation." But most of its business is carried on by Mannheim people. The harbor at Rheinau, just south of Mannheim, was built by private persons, though its administration is now in the hands of the Baden railways.¹

¹ Emile Egger, in *Revue des Sciences politiques*, January-June, 1913.

The traffic of this group of harbors has grown at the following rates:

<i>Mannheim:</i>	1870	41,000 tons
	1893	2,200,000 "
	1901	5,145,000 "
	1909	6,085,000 "
<i>Rheinau:</i>	1901	562,000 tons
	1903	1,011,000 "
	1909	1,797,000 "
<i>Ludwigshafen:</i>	1870	135,000 tons
	1909	2,178,000 "

Care is taken to protect the waterways from unfair and killing competition, such as was adopted by the railways in this country against the canals. "In Germany private railroads did not long continue to employ the methods we know so well in their efforts to paralyze the competition of the Rhine: refusal of prorating agreements, refusal of transfer facilities, unfair rates for working with the river as compared with their rates for working against it."¹ The railroads were bought up by the state in the seventies. When the state roads found themselves prospering, and making large surpluses, they did not reduce rates all around, but rather turned the surpluses over to the state as revenue, which the state has come to depend on.

"If reductions of the Prussian rates in general are prevented by financial considerations, reductions in these rates for the sake of exterminating water-

¹ Clapp, *supra*, p. 119.

way competition are still more efficaciously prevented. The waterway interests are represented in Parliament as are the exporting interests, dependent on the cheaper waterway transportation. The publicity of government rates makes it impossible for the railway officials to exercise any judgment in the matter. Rates tending directly to incapacitate the waterways would be regarded as a measure against the good of the country. The waterways and the harmonious relations which the railways are compelled to have with them are a counter-balance against the generally fiscal policy of the state railways."¹

It is this co-operation between rail and water that has done so much in encouraging the cities on the Rhine to build water terminals.

In France, where the railroads are for the most part in private hands, the situation is very different. The waterways are almost completely cut off from the railways; that is, only an insignificant amount of goods is transferred from one to the other. Rivalry between water and rail way causes this situation, which is unfavorable to industry and commerce. In England the railway companies bought up the canals long ago and put them out of service. Our own Mississippi, which might have played a part similar to the Rhine's, has been prevented from doing so by the railways, "which have not only discriminated against the river in rates, but have refused transfer facilities and have often bought up

¹ Clapp, p. 120.

the land along the river bank, so that no rival railroad could work with the river."¹

In 1906 the traffic on the entire Mississippi River system (16,000 miles) was 19.5 million tons, which represents a decrease of 31 per cent. from the traffic in 1889. The traffic on the Rhine passing Emmerich had increased about 400 per cent. during the same period.²

¹ Clapp, *supra*, p. 68.

² *Idem*, p. 123.

CHAPTER X

MINES, FORESTS, AND AGRICULTURAL LANDS

ONLY second in importance to the railways and waterways are the many other industries operated by the empire and the individual states. These include coal and iron mines, great landed estates and forest preserves, as well as many purely commercial undertakings. The various kingdoms, cities, and communities have owned great landed estates from very early times. Those of the towns and villages are survivals of the communal ownership of land, which was very general in the Middle Ages, while the agricultural estates and forests of the states were the domain lands of individual Kings and princes, who in many instances were the strongest of the feudal proprietors within their territory. The King was a great estate owner, and differed from the lesser nobility in being the largest proprietor in the kingdom. And, fortunately for the nation, these estates were not squandered or given away to favorites as in England; nor were they confiscated by revolution and sold, as in France. The agricultural, forestry, and mining possessions of the various states had their origin in these hereditary

possessions, to which the public has wisely retained ownership.

The following table indicates the extent and value of the mining properties of Prussia alone (1911):¹

SUBSTANCES EXTRACTED	NO. OF MINES	PRODUCTION TONS	NO. OF WORKERS	VALUE IN MARKS
Oil	22	19,708,974	88,751	224,902,200
Lignite (coal)...	5	340,260	470	1,084,620
Iron, lead, zinc, copper, silver.	5	119,802	3,304	12,017,889
Potash	5	585,785	1,772	7,555,340
Calcaire	3	585,785	1,124	2,829,411
Salines	5	122,937	803	3,414,264
Amber	1	391	1,043	2,137,778
	46	21,463,934	97,267	253,941,592

At the present time the domain lands of Prussia exceed 1,000,000 acres. Nearly 150,000 acres have been added between 1903 and 1906. The most important holdings are in the eastern provinces, in which the holdings are as follows: Pomerania, 161,577 acres; East Prussia, 149,735; Brandenburg, 134,950; and West Prussia, 130,185. The other states are also large landowners, Saxony having domain lands of 123,257 acres. Additions are constantly being made to these holdings. Land in the neighborhood of towns, which has risen in value, is frequently sold and the profits reinvested in cheaper lands in the country districts, with the result that the state not only extends its domains,

¹ *L'Exploitation des Mines dans le Royaume de Prusse*, by O. Henry-Gréard, chapter I.

but it does so through the increase in land values and at no expense to the treasury.

The state lands are used as experiment stations, to teach the neighboring farmers the latest ideas in agriculture. Where the land is leased, it is usually for an eighteen-year period, and a high standard of cultivation is expected of the lessee. The management of the farms by the state is on a strictly business basis. There is no philanthropy in its dealings, the state being not unlike a private landlord in its relation to the tenants.

Forests have also been owned by the states and cities from early times. About the middle of the eighteenth century a great impetus was given to the acquisition of forests by a fuel scarcity. There was no coal at that time, no oil, and comparatively little peat, and during a succession of severe winters there was much suffering. As a consequence, many of the state governments formulated forest policies, the motives of which were to secure a sustained yield of wood and timber. It was then established as a policy that no more wood should be cut than was produced in a given year. Later, when coal was discovered, the necessity for a fuel policy ceased, but the policy of forest conservation had become established and was continued for other reasons. To-day barely one-half of the forests are in private hands; one-third belongs to the individual states, and one-sixth to the local

communities. The forests are managed by state foresters, trained in special schools of forestry. From this source a large revenue is derived for the relief of taxation.

Professor William Lazenby, a forestry expert, says of the German forests:

"It is small wonder that the art of forestry has reached a stage of intensive development that no other nation can rival. . . . Through generations of practical tests and experiments, with many failures at first but with a persistency worthy of the cause and characteristic of the race, German silviculture has attained a high degree of perfection. Probably no state has developed a more intensive forest system or has done more to place forestry on a sound-financial basis than Saxony. The average rate of revenue from all the state forests of Saxony is $2\frac{1}{2}$ per cent. They have grown in value for the past 100 years at an annual rate of 3 per cent., so that the total income, counting both cash returns and latent revenue is $5\frac{1}{2}$ per cent."¹

In a report issued by the United States Department of Agriculture, it is stated:

"Forest experts of all nationalities agree that Germany is in an enviable position as regards her lumber supply. No nation in the world makes more thorough utilization of its forest resources. German forestry is remarkable in three ways: it has always led in scientific thoroughness, and now it is working out results with an exactness almost equal to that of the laboratory; it has applied this scien-

¹ *Popular Science Monthly*, December, 1913.

tific knowledge with the greatest technical success; and it has solved the problem of securing, through a long series of years, an increasing forest output and increasing profits at the same time. Starting with forests that were in as bad shape as many of our own cut-over areas, Germany raised the average yield of wood per acre from twenty cubic feet in 1830 to seventy-five cubic feet in 1908. During the same period it trebled the proportion of saw timber secured from the average cut, which means, in other words, that through the practice of forestry the timberlands of Germany are of three times better quality to-day than when no system was used. In a little over half a century it increased the money returns from an average acre of forest sevenfold, and to-day the forests are in better condition than ever before."

The kingdom of Prussia alone realizes over 100,000,000 marks net a year from her cultivated forests.

The mines are situated in different parts of the country. Amber comes from the rivers of the Baltic and East Prussia, lead from Silesia, and zinc from the Harz. In addition, quarries, porcelain factories, smelting-works, mills, bathing establishments, foundries, and other activities have been developed by the individual governments.

Under the German law mineral resources are regalia, as they were in the Roman Empire, it being the prerogative of the state to preserve or exploit the mineral resources in the manner and at a rate best suited to the common welfare.¹ In line with

¹ Doctor Jung-Hermsdorf, *Engineering Magazine*, March, 1911.

this principle, Prussia enacted a law in 1907 preserving to the state the exclusive right of searching and mining coal and salts, while a similar measure extended the power of the state still further and empowered it to take over any discovery of mineral resources on private lands at a fixed valuation.¹

This policy of state control over mineral lands relates back to early times. For hundreds of years the lords of the manor extracted minerals from their lands. In addition, in Silesia and the Harz, the princes had reserved to themselves all mineral rights upon their property. When they were dispossessed of their holdings, the mines passed to Prussia and were lodged in her public domain, where some of them still remain. The law of 1907 was designed to restore to the state the right to explore for coal, rock salt, potash, magnesium, etc., as a corrective of the power of private monopoly, which was rapidly controlling these fields. Under this law the sole right to open new mines in most parts of the kingdom is reserved to the state, private enterprise in these fields being dependent upon state approval, which is granted under such conditions as the department of mines may impose.²

Under these various laws Prussia has become one of the largest coal operators in the kingdom. It now produces 25 per cent. of the Upper Silesian

¹ Roberts, *Monarchical Socialism in Germany*, p. 5.

² Dawson, *Evolution of Modern Germany*, p. 206.

coal output and more than one-half of the output in the Saarbrücken fields. It has, however, no independent ownership in Westphalia, the centre of the coal-mining industry. Several years ago the government came into conflict with the Westphalian syndicate in its desire to have representation in the coal operations of that region. In order to secure this participation, Prussia determined to buy a controlling interest in the shares of the Hibernia Coal Company, which mines 7 per cent. of all the coal in the Rhine-Westphalian district. Shares in this company were purchased through the Dresdener Bank, until a majority of the capitalization had been acquired. The announcement of this purchase so angered the owners that they increased the capitalization and issued new shares to themselves, in order to reacquire a majority of the holdings. The matter was taken into the courts, but ultimately the government yielded in the controversy.

There is strong sentiment in Prussia for the complete nationalization of the coal-mines, which is advocated by many leading economists, like Wagner and Schmoller. As it is, the state produces about 20,000,000 tons of coal annually, or about 10 per cent. of the total output, which is, however, almost completely absorbed in the state iron and steel works, by the railroads, the navy, and other public institutions. For these reasons the state has exercised but little influence as a competitor in this

field. In the administration of the mines the government follows regular commercial methods. It charges current prices for its output, the same as the private operators, and, in consequence, exercises but little restraint on the coal monopoly.

Prussia has been a dominant factor in the production of potash since 1879, in which year a syndicate was organized under the direction of the state and two private concerns. The syndicate later enlarged the field of its operations by the opening of fresh mines. In the management of this syndicate a Prussian official is chairman.

The agreements as to price control of the potash syndicate expired in June, 1909, and could not be renewed because one of the more powerful members believed that more money could be made by the operation of the private mines to their fullest capacity. When it became evident that a working agreement was impossible, the Prussian Cabinet recommended to the imperial government a measure establishing a complete compulsory syndicate, which was finally adopted. Under this law, which runs for twenty years, each of the 65 mines is allotted a certain percentage of the output, the prices for which are fixed by the Federal Council. Should the wages be reduced by any company, its percentage of output is correspondingly reduced, while detailed regulations protect the workmen in their hours of labor and compensation. The statute is so drawn

that mine proprietors, for their own convenience, have been obliged to recreate the syndicate.¹

The purpose underlying the nationalization of potash is to conserve the resources of the nation. Under the law equal opportunity is accorded all producers, big and small, to operate, a certain quota being assigned to each mine, depending upon its producing capacity. But the government fixes the maximum prices for export.²

In the early years of the potash syndicate Prussia was represented by 20 per cent. of the entire production, but new mines were opened and the interests of the government fell to only 7 per cent. In consequence, the power of the government diminished in the councils of the syndicate, and prices were increased and agriculture suffered. The state then purchased the Hersyna mine at \$7,500,000, after which it was able to control 11 per cent. of the output. When an objection was raised in the Diet that the state had paid too high a price, Minister Delbrück stated:

“The question has been repeatedly asked whether the state could not have attained its ends more economically by waiting for a more favorable time to purchase. Yes, a business man who wished to make big profits might argue so, but the state is buying for reasons of public welfare and public interest. The object of this purchase is to make it strong

¹ Roberts, *Monarchical Socialism*, p. 100.

² Jung-Hermsdorf, *Engineering Magazine*, March, 1911.

enough to serve the public interest even without the syndicate, if necessary.”¹

The principles which guided the government in undertaking control of the potash production were as follows:

(1) The belief that production on a great scale must succeed individual production, just as factory succeeded cottage industry.

(2) A syndicate, after supplying the internal market is able, with a relatively small additional cost, to turn out a surplus for the foreign market.

(3) Syndicates have given life to smaller enterprises that might otherwise have been mercilessly killed by competition. The syndicates systematize production and take in smaller works when they have grown to be worthy of attention. The potash syndicate grew from 4 mines in 1879 to 65 mines in the present statutory syndicate, and more are provided for.

(4) No strong party seeks to restrain the growth of syndicates. The Socialists are not opposed. On the contrary, they see in it a step toward the realization of the future state.

In 1904, at a convention in Frankfort, the Socialists made the following declaration upon this question:

“The working classes have no occasion to disturb the revolutionary process of the syndicate system

¹ Dawson, *Evolution of Modern Germany*, p. 206.

through reactionary legislative attempts, because every progressive step in the centralization of capital whereby the interests of the masses are separated from the interests of property teaches impressively and visibly the irresistible superiority of nationally and internationally organized and centrally directed production over the scattered production of free competition. This development is, therefore, a step toward the realization of socialism."¹

As a result of its activities the state virtually controls the potash industry, although it actually produces but a small part of the output. The principles set forth by the government in assuming this connection involve, says Roberts:

"The acceptance by Parliament of the principle that the state has the right of compulsory regulation of private production may have a profound effect upon the future in Germany. In the potash production it has enabled the government to exercise the vital powers that it would have over properties, were they owned by the government, without buying them. Parliament would almost certainly have refused the 200,000 marks or more which would have been required to buy the mines. The government did not controvert, indeed it accepted the idea that other natural products might also be controlled by statutory syndicates."²

It is probable that this compromise course of partnership between the state and private corporations will be extended to other industries, if it works

¹ Roberts, *Monarchical Socialism*, p. 104.

² *Idem*, p. 100.

as expected in the potash industry. The present policy, however, is toward the encouragement of syndicates working under the sanction of the government rather than of legislative checks upon them, along the lines of anti-trust legislation in America. This procedure is entirely in harmony with the German policy of trusting the government. Doctor Jung-Hermsdorf, writing from the standpoint of a patriotic German, says:

“The object of the government is to avoid business fluctuation and depressions as far as possible, because they bear hardest on the poor; to preserve the home market from panics, cutting excessive profits on the one hand and making for continuity of employment on the other. The state can do this only by gaining control over capital for production, the organization of trade and the fixing of prices, in addition to regulating wages and working conditions. . . . While the *authority* of the state is invariably supreme, its functions are of progressive variety.”¹

This writer, representing probably the point of view of the ruling classes, thinks the government should confine itself to regulating industry through partnership rather than ownership, except in the case of natural monopolies. He says:

“State partnership and control, besides steadying business, has the further great advantage that it strengthens the confidence of domestic and foreign

¹ *Engineering Magazine*, March, 1911.

investors. . . . But the state will not go into activities of a higher order, where creative ability and elasticity are decisive factors. In these private enterprise can do better." ¹

Germany faces the monopoly problem with more frankness than does America. The Socialists claim that the only solution is through the transfer of large industry to the state itself, and many prominent professors in the university urge this programme as to the mineral resources of the nation. The government, however, has not fully accepted this view, although it has advanced further than any other nation in this direction. And in this evolution the government has moved from one position to another. At first it was neutral toward large combinations of capital, which have invaded most of the larger industries, such as the iron and steel, coal, glass, chemicals, sugar, spirits, and leather. Now, however, the government is inclined to be friendly to the idea of large industry, but to subject it to inside rather than outside control. Where the state itself owns industries it has itself entered the syndicates, while the state-owned railways give special rates to them, as a still further encouragement.

Despite this fact, Germany recognizes the dangers of monopoly. The secretary of state for the interior said in the Reichstag, May 4, 1912:

¹ *Idem.*

"In the syndicates are growing up organizations which are assuming the character of private monopolies, which may become a good deal more dangerous than state monopolies. I consider it not improbable that we may have to gradually transform private monopolies into state monopolies. On the other hand, we are not yet ripe for such a measure."¹

Professor Schmoller, one of the leading professors of political economy, urges that the state should have representation on the boards of directors of the syndicates. He says: "In any event, it is necessary that the state should acquire an influence on the syndicates. It is desirable that there should be an agreement between buyers and sellers, perhaps negotiated by an imperial board. . . . In a country in which private railways have passed into the state's hands and in which fiscal mining has been begun on a large scale there is certainly nothing extraordinary in setting limits to the formation of trusts."

Public ownership is being urged by some as a means for relieving the financial needs of the empire. New sources of revenue are being constantly sought for military and social purposes. The agrarian classes are opposed to any extension of the land taxes or those which fall upon incomes and inheritances, while the indirect taxes are already very high. Fiscal necessities may lead to further incursions into the field of industry, and such incursions will be received

¹ Dawson, *Industrial Germany*, p. 143.

with but relatively little protest. In any proposals for the nationalization of industry, the government can always count on the support of the Socialists and generally of the agrarians, who fear increased tax burdens and who have but little financial interest in the great industrial undertakings.

The future attitude of the government as regards regulation and control is indicated in a recent announcement that the government intended to establish a monopoly in petroleum, to break the monopoly of the Standard Oil Company. Under this proposal the government did not itself plan to enter the business, but rather to create a legal monopoly in a private company, the capital of which is to be supplied partly by banks already interested in the petroleum industry and partly by public subscription. After the company is formed it is to take over all of the existing wholesale businesses, with their warehouses and plants, and in case of inability to reach satisfactory terms, the state will lend its powers of expropriation for the purpose. In the distribution of the profits of the new company four-fifths are to go to the state and one-fifth to the shareholders.

CHAPTER XI

THE ATTITUDE OF GERMANY TOWARD THE SOCIAL PROBLEM

GERMANY hates waste in any form. She has taught the world the value of the "by-product." This is one of her contributions to industry. Other countries have adopted her methods of industrial salvage, but none of them, with the possible exception of Denmark and Switzerland, has followed her example in the working out of a programme for saving the waste of human lives which the mill and the factory produce.

Some years ago the imperial minister of the interior stated in the Reichstag: "If Germany has experienced a vast industrial expansion equalled by no other country in the world during the same time it is chiefly due to the efficiency of its workers, but this efficiency must have suffered had we not secured to our working classes by the social legislation of recent years a tolerable standard of life, and had we not as far as possible guaranteed their physical health."

Germany, it is claimed by her statesmen, has secured industrial efficiency by the action of the state. The aid of the government has been ex-

tended to the worker just as it has been extended to the landowner, who is protected from the competition of American wheat by the high tariff; to the manufacturer, who is secured from competition in like manner; and to the ship owner, who is subsidized from the nation's treasury.

The state has its finger on the pulse of the worker from the cradle to the grave. His education, his health, and his working efficiency are matters of constant concern. He is carefully protected from accident by laws and regulations governing factories. He is trained in his hand and in his brain to be a good workman and is insured against accident, sickness, and old age. When idle through no fault of his own, work is frequently found for him. When homeless, a lodging is offered so that he will not easily pass to the vagrant class. When sick, he is cared for in wonderful convalescent homes, tuberculosis hospitals, and farm colonies. When old age removes him from the mill or the factory, a pension awaits him, a slight mark of appreciation from society, which has taken in labor all that his life had to give and left him nothing more than a bare subsistence wage.

Despite his hatred of democracy, Bismarck saw the benefit of such a programme. It was he who promoted the insurance laws against accident, invalidity, sickness, and old age. These measures were inspired partly by the history and traditions of

Prussia, partly by the desire to undermine the rapidly growing Socialist party, partly by an appreciation of the value of such legislation to the state. State concern for the dependent classes has been the traditional policy of Prussia for centuries, and Bismarck found a sanction for his proposals in the precedents of the Prussian Kings as well as in the common law and the mandates of Christianity, to which he always appealed. In support of his measures he referred back to similar measures of the Great Elector, Frederick William I, and Frederick the Great as well as to the liberalizing legislation of Stein and Hardenberg in the early years of the nineteenth century. The Hohenzollern monarchs had never been out of sympathy with the common people as were the Hapsburg and Bourbon dynasties. And much of their popularity is traceable to this fact. And Prussia has always avowed that the welfare of the state was identified with the welfare of the common people. Frederick the Great carried through many projects of state socialism for the upbuilding of Prussia. He brought artisans from other countries to build up new industries, he built canals and harbors, and carried through many other undertakings. The Prussian common law contained many provisions for the protection of the poorer classes; it was part of the obligation of the crown to support those who could not support themselves, to provide employment, to prevent

destitution, and to check idleness. This is the legal sanction of state and municipal aid to the dependent poor, which is exclusively a public rather than a private function in Germany. And Bismarck relied on these traditions of the common law as well as the paternalistic measures of previous times in the defense of his policies. He even found legal support for the "right to work" in the ancient law of the land. As early as 1878 he stated: "I will further every endeavor which positively aims at improving the condition of working classes." In this the Emperor joined. In opening the Reichstag in 1879 the Emperor announced: "A remedy cannot alone be sought in the repression of Socialist agitation. There must be simultaneously the positive advancement of the welfare of the working classes. And here the case of those work-people who are incapable of earning their own livelihood is of the greatest importance." In 1881 the Emperor said again: "That the state should interest itself to a greater degree than hitherto in those of its members who need assistance, is not only a duty of humanity and Christianity—by which state institutions should be permeated—but a duty of state-preserving policy whose aim should be to cultivate the conception—and that too among the non-propertied classes, which form at once the most numerous and the least instructed part of the population—that the state is not merely a necessary but a benevolent institution.

These classes must, by the evident and direct advantages which are secured to them by legislative measures, be led to regard the state, not as an institution contrived for the protection of the better classes of society, but as one serving their own needs and interests."

Bismarck protested constantly against the *laissez-faire* individualistic indifference of the state to the weaker members of society. In a speech in the Reichstag he said:

"Herr Richter has called attention to the responsibility of the State for what it does. But it is my opinion that the State can also be responsible for what it does not do. I do not think that doctrines like those of 'Laissez-faire, laissez-aller,' 'Pure Manchesterdom in politics,' 'Jeder sehe, wie er's treibe, Jeder sehe, wo er bleibe,' 'He who is not strong enough to stand must be knocked down and trodden to the ground,' 'To him that hath shall be given, and from him that hath not shall be taken away even that which he hath,'—that doctrines like these should be applied in the State, and especially in a monarchically, paternally governed State. On the other hand, I believe that those who profess horror at the intervention of the State for the protection of the weak lay themselves open to the suspicion that they are desirous of using their strength—be it that of capital, that of rhetoric, or whatever it be—for the benefit of a section, for the oppression of the rest, for the introduction of party domination, and that they will be chagrined as soon as this design is disturbed by any action of the Government."

In 1884 he even proclaimed the doctrine that a man has a "right to work." "Give the working man the right to work as long as he is healthy," he said, "assure him care when he is sick; assure him maintenance when he is old. If you do that, and do not fear the sacrifice, or cry out at state socialism directly the words "provision for old age" are uttered,—if the state would show a little more Christian solicitude for the working man, then I believe that the gentlemen of the Wyden (Social Democratic) programme will sound their bird call in vain, and that the thronging to them will cease as soon as working men see that the government and legislative bodies are earnestly concerned for their welfare."

And he further said:

"Yes, I acknowledge unconditionally the right to work, and I will stand up for it as long as I am in this place."

Then, continuing in the same strain, he said about the man who would work but could not work:

"I am healthy, I desire to work, but can find no work."

Such a man, he said, is entitled to say, "Give me work," and that the state is bound to give him work.

In the discussion in the Reichstag over his social measures, Bismarck said in 1882:

"It is the tradition of the dynasty which I serve that it takes the part of the weaker ones in the economic struggles,"

and, in defense of his proposal for a system of uniform sickness insurance, he said:

"Experience has abundantly shown that the universal adoption of sickness insurance, which must be characterized as one of the most important measures for the improvement of the condition of the working classes, cannot be effected along the lines of free [voluntary] legislation."

In discussing the various measures which he had in mind for the protection of the working classes Bismarck said:

"The end I have in view is the establishment of an institution having State support, and extending to the whole Empire, for the maintenance of old and infirm persons."

In these proposals Bismarck had the support of Emperor William I. In 1881 the speech from the throne in support of further legislation stated:

"The care of those work-people who are incapable of earning their livelihood is of the first importance. In their interest the Emperor has caused a bill for the insurance of work-people against the consequences of accident to be sent to the Federal Council—a bill which it is hoped will meet a need felt both by work-people and employers. His Majesty hopes that the measure will in principle receive the assent of the Federal Governments, and that it will

be welcomed by the Reichstag as a complement of the legislation affording protection against Social-Democratic movements."

Along the same lines the speech from the throne continued:

"These classes must be led by the evident and direct advantages which are secured to them by legislative measures to regard the State not as an institution contrived for the better classes of society, but as one serving their own needs and interests. The apprehension that the Socialistic element might be introduced into legislation if this end were followed should not deter us. So far as that may be the case it would not be an innovation, but a further development of the modern idea of the State, the result of Christian ethics, according to which the State should discharge, besides the defensive duty of protecting existing rights, the positive duty of promoting the welfare of all its members, especially those who are weaker and in need of help, by means of judicious institutions and the employment of those resources of the community which are at its disposal."

The same spirit now animates the business and commercial classes of Germany, even though they protested against the original proposals of Bismarck and the many other measures of social reform which have been adopted in recent years. As indicative of the general attitude of the employing classes, the following is quoted from a publication issued by the Frankfort Chamber of Commerce, which says:

"The 'Manchester School' has had its day and since it had full sway a great change has come over the civilized nations, marked by an increased influence of the governments at the expense of individualism.

"Slowly at first, but then in ever increasing measure mankind realized that the doctrine of 'Laissez faire, laissez passer' was a vicious one and that the Darwinian tenet of the survival of the fittest should not apply to human beings. True enough this knowledge did not emerge from purely altruistic motives, but was a result of the conviction that the road with the fingerpost-inscriptions, 'Elbow room for everybody' and 'Everybody for himself and the devil take the hindmost,' was a short one, leading to nowhere.

"It had become obvious to leaders of men, like Bismarck and Gladstone, that the new methods of modern machinery and large capital had created forms of employment unknown before, that huge urban agglomerations had been called into existence and that the national agriculture of old-world countries like France, England and Germany were being exposed to a great strain by the competition of the virgin soils of new lands.

"Furthermore the new conditions in industry, commerce and agriculture had brought about a change in the personal relations between employer and employed; these formerly patriarchal relations became impersonal in proportion as the numbers of workmen and other employees increased. Great portions of the populations saw themselves helpless and shelterless in case of death, disaster, and disease. Germany was the first state to recognize the threatening danger and, in order to minimize it, adopted the system of compulsory insurance. Prince

Bismarck and his imperial master William I. were the prime movers in this great legislative work, but we think it is only just to mention it, that certain elementary forms of taking care of those in distress existed before and not only in Germany. In this country the relief organizations of the guild corporations provided in case of death and sickness, in England the 'Friendly Societies' did this sort of work, and other countries have similar institutions, but Germany was the first country where the government stepped into the place of private enterprise."

The insurance laws have been in force for thirty years and to-day Germany is a unit in approval of the legislation which has been enacted. There is no protest from manufacturers or employers. Every one seems to realize the value of these measures in the increased efficiency of the work-people, whose health and well-being is greatly improved by virtue of the protection afforded them. There is no attempt to cripple the laws by hostile amendments or to evade their obvious intent. The employers co-operate in the administration of the insurance laws, in the local employment agencies, and in the co-operative building associations, which, with the aid of public funds, have erected working men's dwellings in nearly every large city in the empire. And a generation's experience has amply justified the wisdom of Bismarck's programme. It has in a measure softened the relation of employer and employee, although it did not check the growth of the Social Democratic

party or weaken its requests for further concessions to its political and social demands. But it has contributed greatly to the efficiency and well-being of the working classes. It has relieved them of the haunting fear of sickness, old age, and destitution. It has completely checked the tendency to emigrate and has identified the working classes with the state. It is not improbable that the devotion and patriotism of the German people in the present struggle is largely traceable to the solicitous care which the state manifests for her citizens, a solicitude which has been the traditional policy of Prussia for centuries.

CHAPTER XII

CARING FOR THE UNEMPLOYED

GERMANY does not officially recognize the declaration of Bismarck that a man has a right to work. But the state does many things to insure the opportunity to work just the same. It seems as though the nation said: "It costs \$2,000 to raise a boy to manhood. That much is taken from the wealth of the community. It is wasteful to expend this sum for a man's upbringing and then permit him to be idle, to become a tramp, to be maimed or killed in the factory, or to be disabled through sickness." So the state makes provision for the protection of its human assets. Not that the motive is as sordid as this, although industrial and military efficiency is always in the mind of the Kaiser and his ministers.

How is this achieved? In a great variety of ways. A comprehensive programme of human salvage has been worked out. In the first place, there are the ✓ labor exchanges, which are models of administrative efficiency. There are nearly three hundred of them in the empire which report regularly to the imperial statistical office in Berlin. They exist in every community and fill over 1,000,000 positions every year. They are maintained partly by the cities,

partly by private agencies. They are great clearing-houses for skilled and unskilled labor of both sexes. They have the hearty support of employers and generally of the employees. Few of them charge any fee. The exchange in Berlin, the largest and best in the empire, secures over 100,000 positions annually. It was established in 1888, and is maintained at a cost of \$25,000 a year. It occupies a splendid four-story building, probably a hundred feet front on Gormanstrasse. In the centre of the building is a great open hall capable of seating 1,400 persons. There were probably 600 men waiting for work when I was there. Here the men sit, grouped in sections, distributed according to their employment. When a call is received by mail or over the telephone, the men in the employment desired are called to the desk. The wages and conditions are explained, and if satisfactory the men are given a card to the employer.

Priority is given to the married men as well as to those first registered. On one side of the hall is a buffet, where beer, cigars, and food are sold at a trifling sum. There are cobblers and tailors who do jobs of mending. A shower-bath can be obtained in the basement for a cent. There is a smaller room and canteen for the skilled workers, and another for women workers in another portion of the building. Connected with the registry is a free dispensary and medical-inspection bureau. By these

simple precautions the men are kept strong and presentable. They do not suggest the vagrant, and when they go to the employer they are not down and out in appearance as are the men who roam the streets and live as best they may in private lodging-houses or saloons in America while looking for employment. The exchange preserves the self-respect of the worker. There is no suggestion of charity about it and the general appearance of the men indicates that they are for the most part free from the haunting fear of poverty so characteristic of the unemployed in this country.

Many of the exchanges make special provision for apprentices. Boys and girls about to leave the elementary schools are brought to the exchange before they leave and are given an opportunity to register. As a result, many of them have completed all arrangements for work before they leave school.

Different policies are adopted by agencies in case of strike or labor dispute. These policies are:

(1) To ignore such disputes altogether and to send men as if there were no controversy.

(2) To record vacancies caused by a strike, and to advise the men of such opportunity, but to also advise them of the disputes.

(3) To suspend operations within the range of the dispute during its continuance.

(4) To act in each case upon the decision of the local industrial court.

In most registries the policy adopted is to advise applicants for work of existing wage controversies.

These agencies command the confidence and support of both employers and employees. They are rapidly driving the private employment agencies out of business. The number of places filled by the public exchanges reporting from 1909 to 1911 were as follows:

YEARS	POSITIONS FILLED	BUREAUS REPORTING
1909.....	731,848	230
1910.....	877,042	250
1911.....	1,055,784	267

The municipal agencies act in concert by reports sent to a central agency in the capital of each of the states so that the surplus labor in one market can be sent to another. In addition connections are maintained with the country districts so that agricultural labor can be supplied during the harvest season.

This is the first step in the problem of unemployment. It is a recognition of the social nature of the problem—of the inability of the worker to control his work, to own his tools, or to find the place for which he is most fitted without terrible waste of time and energy. The labor exchange is not unlike the clearing-house system of the banks or the credit agencies of modern business.

Provision is also made in an adequate way for the

wandering worker, the honest artisan seeking a job. Germany does not assume that a man out of employment "with no visible means of support" is a semicriminal. The courts do not place him under arrest as a suspicious person, as do many of our cities. Thousands of men in America are unjustly branded by the ignorant policy which we pursue. They are started on the road to trampdom, vagrancy, and crime by the disgrace which we place upon them. Germany recognizes that hard times, a strike, or a lockout, the introduction of a new machine, are all conditions which the workman cannot control. It accepts the wandering worker as a part of the fluidity of modern industry and provides for him in a variety of ways.

Lodging-houses or working men's hotels are to be found in almost every community. By means of them the worker can travel from place to place, even though he is without money or immediate employment. These lodging-houses are called Herbergen. Some of them are conducted by the cities, others by private philanthropy. In 1904 there were 462 of these Herbergen in Germany, containing 20,000 beds. They lodge over 2,000,000 persons annually of whom a large number are paying guests.

In order to secure admission, the worker must be able to produce a passport showing that he has recently been at work. He can pay for his lodging

and breakfast (about twelve cents) or he can work for four hours for them. The rule is "morning work, afternoon walk." The work is usually of a simple kind, such as chopping wood. Over half of the Herbergen have savings-banks in connection with them, deposits being made by the purchase of stamps. The Herbergen are usually in close connection with the labor registries, and many of them make provision for permanent pay boarders. They are really cheap working men's hotels. To such an extent have these institutions developed in the industrial regions of South Germany, that vagrancy has practically disappeared, as has that class of crimes usually committed by the vagrant class.

The labor colony is another institution for the worker. It is open to those who have lost their grip through drink or are unable to find work through the labor exchange. The labor colony reaches a much lower class than the labor registry. There are upward of forty of them in the empire. They, too, are partly private, partly public. They are not penal colonies to which men are sent, but are purely voluntary. Men enter and leave when they will. Upward of 10,000 persons made use of these colonies in 1908. They are exclusively agricultural, and attract mostly the unskilled worker. They are located on cheap land, which is brought under cultivation by the labor of the men, who produce potatoes, vegetables, and similar products for their

own consumption. Probably 75 per cent. of the men who come to the colonies have been in jail. Yet, strangely enough, there is practically no insubordination and no difficulty in preserving discipline.

None of these agencies create work where no work exists. Neither the labor registry nor the Herbergen open the door of the factory or meet the emergency of industrial depression. They do not create opportunity where none exists; they merely attempt to unite the workless job with the jobless man. They prevent men from losing their grip during a period of waiting. Nor do they provide for the mechanic with a family who is face to face with starvation by reason of the closing of the factory.

During the industrial depression of 1914-15 in America, unemployed men petitioned the councils of many cities to provide temporary relief work. They did not want charity; they wanted work. But the cities were powerless to relieve the situation or had no inclination to do so. State laws bind the localities in such an inflexible manner that they cannot act on an emergency when it arises. They can only cope with such problems as the distant legislature, with little knowledge of city needs, makes provision for. Here again Germany is far in advance of other countries. She recognizes that the worker has a right to be protected from starvation and to expect something more than a visit from the charity organi-

zation society. "Distress work" is often provided to meet emergencies. It is usually limited to the winter months. Cities disclaim any legal or moral responsibility in the matter; they do not recognize "the right to work," but they provide work in considerable measure, nevertheless. They distribute public contracts so as to give the maximum of relief and require contractors to employ only local men. Extraordinary conditions are met to some extent by development work, such as excavations, street paving, sewer construction, forestry, wood-chopping, and the like. Applicants for distress work must be residents of the city and must be heads of families. It is true the work performed is not of the best, and it is more costly than that done through regular channels, but it saves the self-respect of the worker and to some extent recognizes his right to work. In a larger sense, it saves the community from the vagabonds, tramps, and semi-criminals, who are the inevitable wastage of every period of hard times.

Many other services are performed by the cities. Warfare is waged against infant mortality and provision is made for the inspection of school children. States and cities co-operate in the holding of congresses and exhibitions for the instruction of the people along hygienic lines. Leaflets are distributed for the purpose of training mothers in the feeding and care of infants. Infant dispensaries

and clinics are operated, as are model kitchens and milk stations. In Berlin there are many dispensaries for the instruction of mothers in infant-feeding. These dispensaries are in charge of experts, assisted by doctors and nurses. They are used mostly by the working-class families, who receive free aid if they are unable to pay for it. Milk for children is distributed at a low price and the mother is instructed in many ways in the rearing of her child.

Recreation is also a public function. Cities provide many agencies for the leisure life of the people. The people are not left to the self-interest of commerce in their leisure hours, and the opportunities of the working class for recreation are more generous than those of the average well-to-do citizen in America. Every city of any size has from one to three fine military bands, which give performances afternoons and evenings in the parks and zoological gardens. They play the best of music. The larger cities maintain splendid symphony orchestras or choral societies. Municipal restaurants are maintained where wines, beer, and refreshments are sold at moderate prices. The cities and the states also maintain opera-houses and theatres where the best of classical and modern productions are offered at a low price. Subsidies are granted or the opera-houses are let to managers at a very low rental. By these means the drama and the opera are encouraged; they are a part of the life of all classes. Through

them a knowledge of the best of German literature, drama, and music is inculcated. In Germany the leisure life of the people is a matter of public concern. It is one of the overlooked agencies in the explanation of German culture.

CHAPTER XIII

LABOR AND INDUSTRIAL COURTS

SPECIAL courts are also provided to relieve the worker from the delays and costs of litigation which the regular court procedure involves. They are administered jointly by employers and working men through representatives selected by them who act as arbitrators rather than as legal judges. Free legal aid is also furnished by many cities to those in distress, the bureaus being conducted on the same basis as the free medical dispensary. They are usually to be found in connection with the labor exchanges or the *herbergen* and are widely used by the working classes.

The labor courts originated in France, where the first industrial court, *conseil de prud'hommes*, was established in 1806. The courts spread through France, later into Belgium, Switzerland, and Italy, and then into Germany. It was not until 1890 that Germany enacted a general law for the establishment of industrial courts.

The German industrial court consists of a president, who is neither a worker nor an employer, and an equal number of worker and employer members, called assessors. The courts are usually divided

into sections, each of which has jurisdiction over disputes in certain trades or groups of trades. Members are elected from the workmen body and the employer body in each of these groups. The Berlin court, consisting of 420 members, has eight sections. Qualifications for membership in the courts are: The candidate must be at least thirty years of age, a citizen in good standing, and must actually be employed in the trade over which the court has jurisdiction. Members are elected for not more than six years, and must live in the district of the court at the time of his election. The employer body elects the employer assessors and the workmen body the workmen assessors. Elections may take place at intervals of from one to six years, but no term of office can be longer than six years. The local regulations of the Berlin court provide that assessors shall serve for a term of six years, but that every two years a third of each category shall be replaced. Trade-union officials who devote their entire time to the union are excluded from membership in the courts, as they are not considered to be actually at work in the trades they represent. Nevertheless, many trade-union officials are members of industrial courts and practically all the workmen assessors belong to labor organizations. Assessors are considered as holding honorary offices and are compensated only for actual loss of time, workmen and employer members receiving exactly the same

compensation. The president, of course, is a salaried official and is a lawyer.

The jurisdiction of the industrial courts extends not only to disputes between workers and employers, but also to disputes between different workmen hired by the same employer. They have jurisdiction over all industrial employments. In addition to the ordinary industrial courts there are special courts for single occupations, such as mining. The industrial courts do not touch the commercial field at all. For employees in this field there are the *Kaufmannsgerichte* or mercantile courts, loosely connected with the industrial courts (*Gewerbegerichte*). Side by side with the system of industrial courts, and limiting their jurisdiction, is a system of guild courts for the settlement of disputes between the members of guilds and their working people. Employees of the naval and military departments are also excluded.

The jurisdiction of the industrial court is not limited by the amount at issue, as it is in France, where the councils of prud'hommes may decide cases only where the value involved is less than 1,000 francs. Moreover, the jurisdiction of other courts is excluded by the industrial courts, where these exist. Disputes over wage contracts, payments, and sometimes discharge without notice are the most usual class of cases which come before these courts.

The procedure in the industrial courts is very

different from that of the ordinary courts. The aim is conciliation, and as a matter of fact more than half the cases that come up are settled in this way at preliminary hearings. In such cases the functions of the board of conciliation are practically performed by the president alone, although he may ask the assistance of assessors at such preliminary hearings. If both parties unite in asking it, the president may at the close of such a hearing render a valid decision, even without assessors. Should attempts at conciliation fail in the preliminary hearing, they may be renewed at any stage of the proceedings.

The part taken by lawyers in the ordinary courts is entirely suppressed in the German industrial courts. Attorneys are not permitted to appear either as representatives or as assistants. The parties must appear personally, or if this is impossible they may be represented by persons who are themselves subject to the jurisdiction of the court—employers or workers in some industry in the district. Proceedings are much less formal than in other courts, and the president takes a more active part in them. Decisions are based upon law and the customs of the trade as interpreted by the members of the court. Of the cases which are not conciliated many are withdrawn without being contested or are settled by judgments by default. In 1908 less than 17 per cent. of all cases coming before the industrial courts were settled by formal judgment after a hearing of

the parties. In Berlin the proportion was even less—9 per cent.—over 90 per cent. being adjusted without trial.

Every effort is made to settle cases quickly. In 1908 less than 1.5 per cent., even of those cases which were brought to judgment, lasted over three months. Fees are reduced to a minimum and cover only the actual cost of hearing the case, securing witnesses, etc. These are two of the main advantages of the industrial courts. Those expenses of the courts which are not met by fees are met by the municipality or municipalities over which the court has jurisdiction, or, as in the case of the German mining courts, by the state. Sessions of the court are held in the late afternoon or evening, especially in smaller places, so as to interfere as little as possible with the working hours of employers and workmen.

Appeals may be taken from the decisions of the industrial courts to the regular courts, but only when the amount involved is more than 100 marks. The amounts usually involved in cases before the industrial courts are smaller than this. In 1908 not more than 7 per cent. of the appealable cases were taken to a higher court.

Besides their purely judicial functions, the industrial courts have certain administrative functions. Opinions upon industrial questions may be demanded of the courts by government officials. Moreover, the courts may present proposals to leg-

islative bodies, and they sometimes conduct legal-information bureaus.

Collective disputes and strikes also come before the industrial courts. This is one of their most important functions. When the court sits as a board of arbitration, its powers and composition are quite different from what they are in personal disputes. It is one of the duties of the president of the court to keep in touch with trade unions and employers' associations, to secure early information of threatened strikes and lockouts and try to persuade the warring parties to call upon the industrial court to act as a board of arbitration. This can only be done, however, when both parties agree to it. The court, acting as a board of arbitration, is composed of the president and of arbitrators selected in equal numbers by each side. These arbitrators may or may not be assessors, but they must not be concerned in the dispute. Where no agreement is reached, the decisions of the court are not binding upon the parties, but these decisions are made public, and public opinion is relied upon to secure submission to the award. Collective disputes are being brought to these courts for settlement as the system gains public confidence. In three-quarters of the cases agreements are reached, and in most of the others the awards of the court are accepted by both parties. In many cases, however, it has been found impossible to effect a settlement.

"The most important service of the industrial courts in collective disputes, however, is perhaps the assistance which it has rendered in the formation of wage contracts and trade agreements. In a large number of cases which do not appear in the statistics of the work of the board of arbitration, the presidents of industrial courts have presided over meetings of representatives of the two sides at which such agreements have been formulated."¹

The industrial courts have a voluntary central union, which maintains archives in which are to be found the reports, decisions, and trade agreements effected by the courts. The central union also publishes an official organ: *Gewerbe und Kaufmannsgerichte*.

Every city of over 20,000 population must have an industrial court, and smaller municipalities may have them if the local authorities desire or if the workers and employers concerned take the initiative. In 1908 there were in Germany 469 industrial courts, which handled 112,281 cases. It should be added in explanation of the large number of industrial courts in Germany that more than one court may be established in a district. That is, if in a district a court exists which is restricted to certain industries, another may be formed to deal with disputes in other occupations. The courts are state courts.

Most of the cases brought before the courts are

¹ "Industrial Courts in France, Germany, and Switzerland," by Helen L. Sumner, Ph.D., in *Bulletin of the Bureau of Labor*, No. 98, January, 1912.

complaints by workers against employers. Of the 14,522 cases handled in 1908 in the Berlin court, 702 were brought by employers and 13,820 by workers. These courts are much more popular with the workers than with employers, because it is the workers who fear they will not get justice in the ordinary courts, and also because of the disproportionately large expenses attached to a suit where only a small amount is at issue. In districts where no industrial courts exist the number of complaints brought by employers is much larger.

On the whole, the courts meet with general approval, only minor points calling forth criticism. For instance, the provision of the law which assigns foremen and managers to the class of workers or to that of employers, according to whether they receive less or more than 2,000 marks salary, is considered unfair.

The theory underlying these industrial courts is that the labor contract is a peculiar kind of contract which requires special rules, and that the relations arising from it tend to become more and more complicated, thus necessitating special machinery for their regulation. The court is really an adaptation of the jury system, the difference being that the jurors are more closely in touch with the problems brought before them, the customs of the trade and industrial conditions, than an ordinary jury would be. Moreover, these courts receive hundreds of

cases that would slip through the coarser mesh of the ordinary court, owing partly to the expense and long delays of the latter, which are particularly discouraging to the workers. Cases involving as small an amount as 5 cents have been brought before the industrial court. It is encouraging to the poor man to feel that he can get justice, however petty the stake may seem to the wealthier man.

Speaking of these courts a German writer says:

"By its friends, indeed, the industrial court law is considered as the Magna Charta of the German workman. In this court, the labor world of Germany has for the first time found an effective instrument for the prevention of wage reductions and other violations of the labor contract. There is no state institution, he adds, to which workmen cling with more love or with warmer admiration."¹

In districts where there is small-scale production the number of cases brought before the courts is apt to be larger than where large-scale production is the rule. This is due to the fact that conditions of labor are so well standardized in big factories, that workers are afraid of being blacklisted, etc., and so are willing to endure small losses. In small shops, however, and in such industries as building, the manufacture of clothing, and the preparation of food and drink, more disputes are likely to arise.

¹ Jastrow, "Sozialpolitik u. Verwaltungswissenschaft," vol. I, p. 405, in *Bulletin of Bureau of Labor*, No. 98, January, 1912.

In so far as the functions of the courts as arbitration boards are concerned, it is felt that their work, while valuable so far as it goes, can be of no use when a strike spreads over many cities, as did a recent ship-builders' strike in various ports, or when it becomes national in scope. A bill was therefore brought before the Reichstag (1911 or 1912), which provides for the establishment of an arbitration board for the entire German Empire, to deal with collective disputes extending over more than one city, the industrial courts, however, to retain their functions in the settlement of local disputes.

These are the more important agencies provided for the care and protection of the worker in his employment. They indicate the attempt of the state to keep in touch with the changing nature of industry and to legislate accordingly. Public opinion and legislation do not lag many years behind the problem, as they do in this country. Thought keeps abreast of industrial conditions as they present themselves.

CHAPTER XIV .

SOCIAL INSURANCE AND SOCIAL DEMOCRACY

THESE are some of the means employed to prevent waste, to keep the producing power of the nation at a maximum, to protect the worker and save him and his family and the community from the demoralizing effects of hard times and irregular employment. The programme stops far short of a solution of the industrial problem, and the Socialists have but little sympathy with these palliatives as in any sense remedial. But from the point of view of the individual and society it is far in advance of anything yet developed in America, although as a social programme it fails in that it does nothing to create more jobs or bring about a juster distribution of wealth. Neither the labor exchanges or the lodging-houses or the relief agencies increase money wages or the general standard of living.

One can speak with more enthusiasm of the protection assured the worker from accident, sickness, and old age through the insurance funds. Even the Socialist admits that these are steps in the right direction and have materially improved the condition of the working classes.

The insurance laws date back to the early eighties, a generation ago, when Bismarck was engaged in his struggle with the rapidly growing movement for social democracy. He hoped through remedial social legislation to undermine the following of the party. But Bismarck was more than a political opportunist when he said in 1882: "It is the tradition of the dynasty which I serve that it takes the part of the weaker ones in the economic struggle."

And in discussing the various measures which he had in mind for this purpose, Bismarck said in the course of a debate: "The end I have in view is the establishment of an institution having state support and extending to the whole empire, for the maintenance of old and infirm persons," and in another speech on the same general subject he said:

"The domain of legislation which we enter with this law . . . deals with a question which will not soon disappear from the order of the day. For fifty years we have been speaking of the social question. Since the passage of the Socialist Law I have continually been reminded that a promise was then given that something positive should also be done to remove the legitimate causes of Socialism. I have had the reminder in mind *tota die* up to this very moment, and I do not believe that either our sons or grandsons will quite dispose of the social question which has been hovering before us for fifty years. No political question can be brought to a perfect mathematical conclusion, so that book balances can be drawn up; these questions rise up,

have their day, and then disappear among other questions of history; that is the way of organic development."

This was the appeal of Bismarck in support of his proposal for a comprehensive series of laws for compulsory insurance against accident, sickness, and old age, spectres which pursue the average working man from youth till old age.

The insurance laws for sickness were enacted in 1883, for accidents in 1884, and for old age and invalidity in 1889. All this legislation was codified and amended by the law of 1911, which embodies the experience of previous administration.

Insurance against sickness is provided for those employed in factories, mines, workshops, quarries, transportation, and other industries. Employees of public enterprises are also covered, as are agricultural laborers, household servants, teachers, and practically all wage-earners receiving less than 2,000 marks a year. The sickness-insurance funds are of various kinds. There are local funds provided by the parishes for all of the trades within their limits; while many of the large industries have funds of their own, as do the miners and the building trades.

All of the funds provide for free medical and surgical attendance, hospital treatment and supplies, as well as sick pay from the third day of sickness. The benefits amount to from one-half to three-

fourths of the daily wages received by the beneficiary or the income upon which his assessment is based. The pay is continued for not more than twenty-six weeks, after which time, if the illness still continues, the burden is transferred to the accident-insurance fund.

The sickness-insurance fund is maintained by contribution from the working men, the employers, and to some extent from the community. Generally the employee pays two-thirds of the premium and the employer one-third, the liability of both being ascertained by periodic reports from the employer as to the number of employees liable to insurance. The premiums are collected by stoppage, the employer deducting the assessments of the employees when wages are paid, which, along with his own share, are then transmitted to the fund. The expense to the worker is from $1\frac{1}{2}$ to 4 per cent. of his wages.

The administration of the funds is largely in the hands of boards chosen by the employers and the employees. General meetings are held, to which all persons who contribute to the fund may come, at which meetings the delegates who have charge of the insurance are elected.

A second insurance fund is provided against accident. The provisions of this law cover substantially the same classes as those covered by sickness insurance, and the method of administration

is substantially the same. Every employer is bound to provide insurance against accident. Upon opening a factory he automatically becomes a member of the trade association covering his business, and is bound to contribute to the insurance fund. This fund is managed by the executive board of the trades, which has power to classify trades and fix the danger schedule. But better than this, the board has power to enforce rules and appliances for the prevention of accidents. If a member refuses to abide by the ruling of the board, he may be fined for his neglect or his danger rating increased.

By this means the employers are stimulated to introduce safety devices, while the special knowledge on the part of the individual trade association leads to a better administration of the rules than would be possible on the part of the state. In all of these matters the employees are consulted. They are also allowed representation on the executive board.

Benefits under the accident-insurance law are not left to judicial inquiry. The employee is not put to the expense and delay of a long litigation. Even though the employee is negligent, he is entitled to compensation, unless there should be evidence that he intentionally brought the accident upon himself. Here, as in sickness, the cost of human losses in industry is shifted in part onto the cost of production. It is passed on to the community where it belongs. It is treated as an inevitable incident to industrial

conditions. Germany does not compel the worker to make a vicarious sacrifice for the community.

The amount of the compensation paid depends upon the wages of the employee and the extent of the injury. If he is wholly incapacitated by the accident, he receives a full pension, which amounts to two-thirds of his yearly wage. If he is still able to work, the pension is adjusted to his earning ability. In case of accident which results in death, an immediate payment of about one-sixth of the yearly wage is paid. In addition to this the widow and dependent children are pensioned, the widow until her death or remarriage and the dependent children up to their fifteenth year. In this event the annual pension does not exceed 60 per cent. of the annual wage.

Not only is the German workman insured against sickness, which marks the beginning of much of the poverty of our cities, as well as against the accidents of industrial establishments, but since 1891 practically all German working men and working women over sixteen years of age are insured against old age. Those whose earnings exceed \$500 are not covered by old-age insurance nor are the higher class of employees and servants. The administration of this branch is carried on by insurance societies, which cover certain sections, or by the state at large. All of them are under the supervision of the state and are controlled by the employers and the employees. The

old-age funds are supplied by the employers and the employees, who contribute in equal shares to the fund. To this the empire adds \$12.50 toward every pensioner. The cost to the worker is about the same as the sickness insurance. In order to enjoy old-age insurance persons must have made their prescribed contributions to the fund; they must have been members for a certain length of time and have either become disabled or reached their seventieth year. The premiums of the employees are deducted by the employer weekly and are attached to cards by means of stamps at the time of the payment of the wages.

The amount of the old-age benefit received, it is true, is not very large. It is not sufficient in itself to support the recipient. It amounts to from \$27.50 to \$60 a year, according to the wages enjoyed or the premiums paid by the beneficiary.

An overwhelming majority of the population are covered by one or all of these insurance funds. The population of Germany is 67,000,000, or approximately 13,000,000 families. In 1908 there were 13,189,509 persons of all classes insured against sickness. The contributions amounted to \$91,491,000, and the insurance paid out in benefits of all kinds was \$82,762,000. The number insured against accident in the same year was 23,674,000, the amount collected was \$51,887,000, and the compensation and benefits paid to the insured and their dependents

was \$39,471,000. The number insured against old age and invalidity was 15,554,000; the contributions by the employers and the employees amounted to \$71,470,500, and the sums paid in pensions and other benefits, \$45,369,000. The average amount of old-age pensions paid in 1905 was about \$40. During the twenty years from 1885 to 1905 the sick benefits paid to working people amounted to \$687,820,000, the accident benefits to \$229,475,000, and the old-age and invalidity since 1891 to \$290,540,000. All told there has been paid the colossal sum of \$1,276,835,000 by these three insurance funds. Of this total the working classes paid less than one-half, the employers a somewhat larger share, while the empire contributed \$96,700,000.

Speaking of the insurance funds and their benefits, Professor W. J. Ashley, of England, says:

“(1) Two-thirds of all the wage-earning work-people in Germany are insured against sickness, and can confidently look forward to receiving, in case of need, both medical assistance and pecuniary relief; *i. e.*, there is a much narrower fringe of people totally unprovided for. (2) A considerable part (one-third) of the cost is *compulsorily* borne by the employers. (3) Thirteen out of sixteen wage-earning work-people have a right to a small pension in case of permanent incapacity, or on reaching the age of seventy—a far larger number than the few who in England benefit by friendly society pensions. . . . The pension is small, varying from about two shillings to five shillings a week. But, added to other

means of livelihood, it will often make all the difference between a pinched but possible existence and absolute starvation; and it is to be remembered that it can be claimed as a right and not as a charity. (4) Almost two-fifths of the cost of this is also compulsorily borne by the employers.”¹

The cost of these insurance schemes is a substantial burden to the employing classes. Yet, in spite of the increased cost which it entails, German industry has not suffered in competition with the world. The system is empire-wide, and the contributions assessed against the employer are passed on to the cost of production like any other charges. It is also probably true that the efficiency and well-being of the working classes has been so greatly improved that the employers themselves have gained by reason of the insurance.

One cannot exaggerate the effect of the insurance legislation on the mind of the worker. The fear, uncertainty, and even terror which are ever present in his mind are relieved. The contributions, it is true, are not very generous; the worker is compelled to make contributions to the funds, and the administration of the law has some defects. But even the Socialists are inclined to admit the advantage of these laws. Edmund Fischer said of them in 1905:

“Let the Industrial Insurance legislation be depreciated as it may, it must nevertheless be con-

¹ *The Progress of the German Working Classes in the Last Quarter of a Century*, p. 18.

fessed that the old-age and invalidity pensioners take quite another social position to that of the incapacitated grandfather of twenty-five years ago, who was a load upon his children or was exposed to the scandal of being maintained by the parish. Every increase of the pensions is thus a piece of civilizing work. The social laws are, it is true, only foundation walls, but they are these at least, and for that reason they are the beginning of a great fabric of human solidarity."

Taking a more practical view of the question, Herr Paul Kampfmeyer, the Socialist writer, said recently in the *Sozialistische Monatshefte*: "The German industrial insurance legislation has had almost the same effect for labor as protective legislation. It means an actual economic gain of a milliard and a half of marks" (\$375,000,000).

Aside from the positive accomplishments of the state in these lines of social reform, one is impressed with the seriousness with which the cities as well as the nation are considering the whole question of protection and care of the people. There are numerous conferences, attended by representatives from the empire and the various states, from the cities, the universities, and the philanthropic societies. The best thought of the nation is given to the study of ways and means for the solution of the many problems which arise in connection with unemployment, with the hazards of industry, with the poor and the destitute members of the community.

Poverty has not been abolished in Germany. Industrial depression takes its tribute there just as it does with us. But the impressive thing about it all is that the nation views these questions with something of the same seriousness that it does the building of dreadnaughts, railways, or canals, the adjustment of taxes, and the building of cities. It calls to its aid the state and the municipality for the training of the body and the mind as well as for the keeping of the worker in as high a state of efficiency as possible.

It is, of course, difficult to measure the effect of this legislation or to make accurate comparisons of labor conditions in different countries. There are so many elements involved. And it is hard to portray the exact conditions of the working classes. The German artisan works long hours at exhausting labor; his wages are low in comparison with those which prevail in America; housing conditions are very bad, not only in the city but in the country, and the worker is far from enjoying the freedom of action or the hopeful outlook of this country. Poverty of the most distressing kind still prevails, the life of the people is in many ways poor and sordid, the unrest of the workers and their political demands are all justified by conditions. It would be false to suggest that Germany had made any revolutionary changes in these matters or aimed at a programme of industrial justice or political equality. But some

things can be accepted. In the first place emigration has almost ceased from the German cities. The worker is better satisfied with what he gets at home than by the promise of greater rewards in the new countries. He has the assurance of protection against the worst misfortunes that can befall him, and if he does not amass wealth he at least knows that sickness, accident, and old age have lost some of their terrors. The legislation of Germany has been directed against the misery and waste of the worker rather than against his low wages or his industrial and political status. These are gains which he has to make for himself. And the worker recognizes that fact. It is for these that he organizes into the trade-union, it is this that lures him to the Socialist party, it is this that lies back of the ceaseless propaganda that is carried on.

And it should be noted that this paternalistic legislation has not had the effect which Bismarck anticipated. It has not reduced the Socialist vote, which has grown from year to year with almost unchecked rapidity. In 1871 the party elected 2 members to the Reichstag, in 1875 9, in 1877 12. In 1871 the total vote was 124,655, in 1875 it rose to 351,952, and in 1877 to 493,288. Despite the repressive laws adopted after the attempt on the life of the Emperor and the enactment of the insurance laws which were expected to satisfy the worker, the growth in the Socialist vote continued,

although the vote in 1881 fell to 312,000. In 1884 it rose to 539,000, in 1887 to 763,000, in 1890 to 1,427,000. Since then the vote as well as the representation in the Reichstag has continued to increase with each election. The vote and the representation in subsequent years are as follows:

YEARS	TOTAL VOTE	REPRESENTATIVES ELECTED TO REICHSTAG
1893.....	1,787,000	44
1898.....	2,107,000	56
1903.....	3,011,000	81
1907.....	3,259,000	43
1912.....	4,250,000	110

Political agitation and compulsory education have created a hunger in the mind of the German workman for further enlightenment. More than any worker in the world, he seems to realize the value of knowledge and its aid to him in the bettering of his condition and the enrichment of his life. And the German worker has evolved many agencies of his own for satisfying this new desire.

One of the Socialist deputies in the Reichstag recently said: "You do not know the workman's pride. We support ourselves by the work of our hands, and on labor work ourselves upward. We have painfully educated ourselves in the evening and night hours, while to you education came without effort, yet I would not exchange intellectual power with you."

Many opportunities for culture have been created by the workmen themselves. Educational associations are to be found in the towns, many of which have existed for years. More recently they have become training-schools for socialism. Special educational committees are formed in connection with the local trades council, or trade-union, which provide intellectual and recreative opportunities for members of the Social Democratic party. Lectures are given on socialism, science, history, ethics, and natural science. The stereopticon is widely used. Musical, literary, and dramatic performances are also held, as well as exhibitions for the dissemination of general knowledge. The Socialists have a school in Berlin where classes are held throughout the winter months, in which such subjects as political economy, sociology, jurisprudence, history, rhetoric, and other subjects are studied. The classes do not begin until nine o'clock and last for an hour and a half. Similar institutions have been arranged in other cities, there being no charge or an insignificant one for attendance. The only condition is that the member shall belong to the Socialist party. In Munich the Working Men's Educational Association offers twenty courses of lectures, varying from two to twelve in number, and the subjects studied, among others, are the following: "Introduction to political economy," "agrarian reform and policy," "political and culture history of the nineteenth

century," "evolutionary periods in Bavarian history," "history of political parties in Germany," "industrial insurance," "international law," "the development of co-operation in Germany," "modern poets and thinkers," "Albrecht Dürer," "the German language," and "theories of criminal psychology."

The lecturers are for the most part political and party leaders, members of parliament, trade-union leaders, editors, and social authors. The economic subjects are most popular. They are listened to by crowded audiences of working men and women who attend them after a long day's work.

The working men, as in Belgium and Denmark, are also developing an artistic and dramatic life of their own. In Berlin there is a "free people's stage," where dramatic performances of a high order are given at a small cost. The cheap and tawdry finds no place in these performances, the dramas being mostly of a political and social order. Such names as Schiller, Ibsen, Hauptmann, and Sudermann are the most popular. There are tragedies of Shakespeare and Goethe as well as good modern comedies. The same organization provides sports and recreation on Sunday in the suburbs, the children being led to their playgrounds by bands and members of the working men's party.

In recent years the temperance movement has taken hold of the German working man. Germany

is the last country in the world where prohibition would seem a hopeful propaganda, yet during recent years the agitation for temperance has made great headway. Drunkenness has never been a German vice, even though the Germans and especially the Bavarians are great beer-drinking people. But the idea has gained ground that the use of alcohol is detrimental to the individual worker as well as the working-class movement. And socialism has promoted the policy of abstention. The movement is not a moral one. Nor is it stimulated by such organizations as exist in America and England. It is purely utilitarian and is inspired by a growing appreciation of the evils which result from the use of alcoholic beverages. This is not the only influence leading to temperance in Germany. Yet it is probably the most influential one. The extent to which this movement has reached the working classes is seen in the fact that during twenty years the consumption of beer has fallen in Munich from 109½ to 64¾ gallons per head.

CHAPTER XV

HIGHER EDUCATION—PROVIDING THE EXPERT

ONE need not be an expert to appreciate the extent to which German science contributes to industry, trade, and the arts of war. And one need not be an educator to see in the schools of the country one of the great, possibly the greatest of all, influences in her almost single-handed power. Germany is the land of the schoolmaster. The educators and the war minister are the guiding spirits in her life. Beginning at the top, there are 21 universities with an enrolment of 66,000 students. These are not colleges in the American sense of the term, preparing students for a Bachelor of Arts degree; they are advanced institutions, conferring the degrees of Doctor of Philosophy, of Law, Medicine, and Science. The gymnasium corresponds roughly with our colleges; the university with the postgraduate departments of Harvard, Columbia, Johns Hopkins, Chicago, and a half dozen great State universities, which enroll in these advanced courses not to exceed a few thousand men. Germany could be put inside the confines of Texas and still leave room for Switzerland. Yet this relatively small na-

tion geographically has a great army of men preparing for the severest kind of competition in the business, professional, and scientific walks of life.

Higher education had its beginning in the awakening of Germany following the Napoleonic oppression. The University of Berlin was founded in 1810. It was followed by Breslau, 1811; Bonn, 1818; and Munich, 1826. There had been universities before of the mediæval type, but these new state foundations were part of a consciously directed movement, to recreate Germany, like the political and industrial reforms of Stein and Hardenberg.

Friedrich Paulsen says of the founding of the University of Berlin:

“It had been intended, from the first, to become a centre of German science and learning—an imperishable monument of the strength and self-sacrifice which enabled the prostrate state to rise again and at the same time of the spirit in which this elevation was effected. The king himself at one time defined that spirit by saying that the Prussian state would have to make up for its loss in physical by intellectual forces. The new idea that came in with the University of Berlin was that the university should be above all the workshop of free scientific research. From the very beginning the first qualification for membership on the teaching staff was skill in scientific research rather than teaching ability. University work was divested of everything that smacked of the school or secondary school.”¹

¹ *German Education Past and Present*, book 4, chapter II.

The same spirit animates the universities to-day. The German student enters the university after he has completed his leaving examination from the Gymnasium. He enters it as men in America enter the professional school, with a definite faculty and a definite goal before him. He has generally chosen his profession; he is preparing for life, and the university is definitely adjusted to his choice. There are faculties of the greatest variety of subjects, many of them definitely designed for the civil service, whether it be law, state administration, the administration of cities, education, or science. And back of the efficiency of Germany in all her governmental activities is the training provided in the universities and technical schools, which is a prerequisite in most instances to examination for the state service.

Following 1870 a new development took place in higher education. It involved an emphasis upon natural sciences, above all on chemistry, with technological practice, through which "science has literally been turned into a gold-mine." New fields of research and new chairs are continually being added, while new types of universities are being opened like those of Frankfort and Düsseldorf.

Growing out of the emphasis upon exact science, eleven technical universities (*technische Hochschulen*) have been established. They have the same standing as the regular universities and require an equally exacting training, though with less Latin

and Greek. These schools train for the higher technical professions, such as architecture, engineering, chemistry, mechanical engineering, naval engineering, and are one of the contributing factors to the scientific achievements and the highly trained civil service of the state. These universities are generally located in the large cities. They enjoy an extraordinary prosperity and attract students from all countries.

Speaking of the technical colleges, Professor Cooley says:

“No other institutions seem to have been more important in promoting the great industries of Germany. They illustrate Germany’s patient toil and tenacity in seeking success in the industrial world by rational means and scientific methods. They are institutions devoted to the adaptation of science and education to the necessities of economic life.”¹

These technical universities enroll 17,000 students, which, added to the attendance at the universities, brings the total enrolment of the higher research institutions up to 83,000.

But the opportunities for advanced education do not end with the universities and technical schools. There are 3 schools of mines, 8 agricultural colleges attached to the universities, 5 veterinary colleges, and commercial colleges of advanced rank at Leipsic, Cologne, Frankfort, Aix-la-Chapelle, and Hanover.

¹ *Vocational Education in Europe*, p. 173.

Prussia has an agricultural college in Berlin with departments for the sugar industry and the manufacture of yeast and starch. There are forestry schools for those preparing to enter the government forestry service. Berlin has a school of town-planning, Düsseldorf has recently opened a college of municipal administration, and Frankfort has just dedicated a municipal university, similar in rank to the older foundations of the empire.

In addition to the above there are 424 commercial and industrial schools of lower rank, which prepare men for business and industrial pursuits, whose courses include modern languages, international law. and business efficiency.

Other special schools are provided by the cities, planned for particular purposes or for boys and girls of talent. There are textile schools in those parts of Germany where the textile industry prevails. Essen has schools devoted to training in the iron and steel industry, while similar schools exist for the building trades, for machine trades, and for other industrial ends. Altogether there are 200 such special high schools, in addition to the technical and commercial universities.

The training received in these schools explains the wonderful skill of the German workman; the facility, ingenuity, and diversity of German industry. Of special influence in this field are the higher schools for industrial art, which cultivate the faculty of

imagination and invention rather than mere technical skill. Some of these schools are general, some are special. But in each case they endeavor to adapt their courses of study to local industrial conditions. This is particularly true of the industrial art schools, like those of Munich, Frankfort, and Düsseldorf. In these schools we find courses for decorators, furniture designers, sculptors, modellers, and jewellers, while many of the schools have other courses for engravers, etchers, enamellers, lithographers, book designers, and landscape-gardeners. There are courses in women's artistic handicrafts. All of these schools have workshops to protect the pupils from becoming mere draftsmen.¹ Evening and Sunday courses are provided for workmen who cannot afford to attend the schools during their working hours.

When we consider the universities, technical schools, commercial colleges, and special schools of various kinds, enrolling several hundred thousand students, specializing to the last degree along every line of thought, science, and industry, and compare this provision for the training of a nation with the educational equipment of England, France, or even the United States, we find an explanation, for the most part an overlooked explanation, of the foundations of modern Germany; of the industrial discoveries, the contributions of science to industry, the

¹ Cooley, *Vocational Education in Europe*.

development of the by-product, of intensive mining and agriculture, and the expansion of the state from an agricultural country of a generation ago into the most dominating industrial nation of modern Europe.

There are faults in the system. There is a terrible pressure of highly educated men struggling for every opening. There is complaint of overwork, of defective eyes and even of defective physique as a result of overtraining and too great pressure. There is undoubtedly individual waste and countless disappointed ambitions. All these are vicarious costs which the expansion of higher education involves in a country of relatively limited opportunities. But education itself has created opportunities. It has created new industries. The wonder is not that the overcrowding is so great, but that it is relatively so little, in view of all the conditions.

Undoubtedly Germany is the most highly educated nation in the world. She took the lead in the movement for the universalization of higher education. Her universities and technical schools attract men and women from all over the world. They have profoundly influenced higher education in the United States. They gave us the postgraduate course, the seminar, and the idea of research. Our higher universities were modelled upon those of Germany, just as our colleges were modelled upon those of Great Britain.

But education in Germany is not top-heavy by

any means. It is built from the bottom up, with compulsory education for all classes from six to fourteen years of age. There is no illiteracy in Germany, or practically none. It amounted to .03 per cent. in 1905. In France illiteracy is 14 per cent., in Great Britain 13.52 per cent., in Italy 30.6 per cent., in Austria 26 per cent., in Hungary 40.9 per cent., in Russia 61.7 per cent., while in the United States it is 7.7 per cent.

Education is prized by all classes. It is looked upon as the one avenue of advancement. It is almost exclusively public and is generously supported by taxation. Individual cities have developed educational programmes of their own to meet local conditions, to encourage industry, to attract residents. Above the minimum standard presented by the state they have added new schools and colleges designed to promote their local needs. The schools are for the most part big and spacious. They contain the most modern equipment, and the elementary schools are surrounded by playgrounds. Next to the army and the navy, education receives the most solicitous thought of the state. It is recognized by Kaiser, minister, local authorities, and the people as the open road to national greatness and power.

Below the universities are the secondary schools, the gymnasia. These correspond roughly with our colleges and high schools in the age of the pupils,

but not in the methods employed. The gymnasia lead directly to the university, the average length of preparation before the pupil is ready for college being twelve or thirteen years, about the same as it is in this country. But the work in the gymnasia, so far as study goes, is much harder than it is in this country and the student is much more thoroughly trained than he is with us.

After a careful study of America, Doctor Georg Kerschensteiner, director of the Munich schools and the leading exponent of continuation along vocational lines, makes this comparison with the German and American type of secondary education:¹

"It is undeniable, that the average intellectual maturity of the German pupil at entrance to the university is considerably higher than the average intellectual maturity of the student entering the American college. In my opinion this is due to several causes. In the first place it is due to the fact that the stricter scientific method that characterizes the work of the secondary school as compared with that of the elementary school, begins too late, if it is postponed until the fourteenth year, as in the United States. The habit of strict logical thinking cannot be inculcated early enough. But the unsifted scholastic material of the common school does not permit the same intellectual demands upon it as the selected material of the secondary school. Thus the secondary schools of the United States

¹ "A Comparison of Public Education in Germany and the United States," Doctor Georg Kerschensteiner, *United States Bureau of Education Bulletin*, 1913, No. 24.

not only start their work too late, but they have to eliminate immediately in their students various habits of purely empirical thinking, a condition with which the German secondary school does not have to contend. Admittedly the secondary school in Germany begins too early when it starts at nine years of age, but just as surely does the American secondary school begin too late."

The gymnasium teacher is thoroughly prepared. He must spend at least four years at the university. This is followed by a searching state examination and a year of pedagogical training. And the teaching is excellent. The secondary schools have highly equipped teachers, in so far as preparation and examinations can insure them.

The discipline in the German gymnasia is very different from that of the student in the American high school or college. "The American high school student," says President Pritchell in the Fifth Report of the Carnegie Foundation, "acquires a superficial knowledge of many subjects and learns none with thoroughness. He lacks the hard fibre in intellectual discipline."¹ The reverse is true in the German gymnasia. There are no electives. The pupil must take the course as laid out by the state or leave school. And he is trained to painstaking intellectual effort. He acquires patience, persistence, endurance, and thoroughness, which are the virtues promoted by

¹ *United States Bureau of Education Bulletin*, 1913, No. 24. "Comparison of Public Education in Germany and the United States."

German education. On the other hand, the German gymnasia fail to foster many of the qualities of the American high schools or colleges. They do little to promote initiative, good-fellowship, and cheerfulness. There are none of the many out-of-school activities which are characteristic of secondary and college education in America.

The high schools, or gymnasia, are divided into three groups, each leading to a definite goal. Up to very recently the classical gymnasium was the prevailing type. It trained for the university, with the emphasis placed upon Greek and Latin. By changes inaugurated in 1901 the monopoly of the classics was overthrown and provision was made for new types of preparatory schools leading to the technical high schools and the special universities. The *Realgymnasium* teaches Latin but no Greek; it favors the modern spirit and emphasizes modern languages and science. The *Oberrealschule*, however, teaches neither Latin nor Greek, but restricts its teaching in the main to subjects of practical importance along scientific and mechanical lines. All three types have common instruction in German, history, and religion. It is only through the classical gymnasium that one may enter the faculties of theology and philosophy in the higher universities.

A great advantage of the long gymnasium course of nine years is that it permits a mastery of a limited number of subjects rather than a diversified smatter-

ing of many. In the *Oberrealschule* in Charlottenburg, for instance, six years are devoted to the natural sciences. Similar periods are devoted to physics, chemistry, and mathematics, while from six to nine years are given to English, history, French, German, and geography. This is the foundation upon which the student enters the university and the technical school. The work has been confining, examinations are difficult, and the student has acquired the ability to concentrate, to master a given subject. He knows how to work.

When the boy enters the university a reaction comes. During the first semesters many of the students loaf; they enter the student corps; they invite their souls to the many things denied them during their gymnasium course. This is the playtime of the German student, and he takes advantage of the opportunity. He registers at the university and is free to attend classes or not, as he sees fit. The only necessity is to meet the final searching examinations, which are oral as well as written, preliminary to his Doctor degree. He usually goes from one university to the other, in order that he may study under the recognized leaders in his particular branch. And then during the last eighteen months or two years of his course he reads widely and prepares for his examinations, usually with an eye upon one of the professions or the state or municipal service.

CHAPTER XVI

ELEMENTARY EDUCATION

PRIMARY education is compulsory for eight years, and for ten months in the year, all over Germany. The compulsory age is generally from six to fourteen. The length of the school year varies from forty to forty-two weeks, all vacations together amounting to about nine weeks in the cities and eight weeks in the country districts. In the United States the length of the school year is often as low as eight months and sometimes as low as five or six months. The average number of school days in the year 1900-01 for the United States was 144.2. It ranged from 76.1 in North Carolina to 191 in Rhode Island. It is true that North Carolina, which had not even a compulsory education law (1912) is the least advanced State in this respect, but there are twenty-seven States in which the average attendance was less than one hundred days, or between three and four months. The average child in Germany spends more weeks in school and more hours each day in study than does the child in the more advanced cities in this country.

The German *Volksschule* (people's school) and

Bürgerschule (citizens' school), with their eight-year courses of study, correspond with our own elementary schools. They do not prepare pupils for high-school work, for those who plan to continue their education into the gymnasium, or secondary school, transfer to the latter after the third or fourth year of the elementary course. As a consequence the pupils in the elementary schools are more homogeneous; here they receive their whole formal school education, from which they go out into the world of trade, business, or farming, as their necessities require.

The great majority of the pupils attend these public schools, which are supported by public funds, and tuition is usually though not always free. In Saxony a small fee of about \$1.25 or \$1.50 a year is required of the parents, unless they are unable to pay.

The purpose of these schools is eminently practical. They train the children in religion, good conduct, and especially patriotism, which is emphasized in a great variety of ways. In addition, they receive general instruction in civic and political life. Morality is taught through religion, children of each creed being taught separately. Behavior is taught; etiquette is made a special point. The children learn how to address older persons, how to enter and leave a room. They acquire the ability to express themselves clearly and succinctly; how to observe and classify their observations.

Thoroughness (*gründlichkeit*) is the prevailing note in the elementary schools. Much harder work is demanded of the pupils than of our own. Not only is the school year considerably longer than in the United States, but the programme for the last three or four years of work calls for thirty-two hours each week, as compared with twenty-five, the usual number in this country.¹

Considerably more morning work is done than in our own schools but less in the afternoon. School begins at eight and meets every week-day, including Saturday. The work is usually over at one or two o'clock, and the school day is broken up by frequent recesses. In addition, children go to bed early and rise early. In many cities they may not frequent

¹ The range of studies in the elementary schools (*Bürgerschulen**) of Berlin is as follows:

SUBJECT	6TH YEAR	7TH YEAR	8TH YEAR
	<i>Hours per Week</i>	<i>Hours per Week</i>	<i>Hours per Week</i>
Religion	4	4	4
Reading, language, spelling	6	6	6
Geography	2	2	2
History	2	2	3
Arithmetic	4	4	4
Geometry	3	3	3
Nature study, including physiology, elementary physics, and chemistry	4	4	3
Drawing	2	2	2
Singing	2	2	2
Gymnastics	2	2	2
Writing	1	1	1
	32	32	32

*The *Bürgerschulen* are of a slightly higher grade than the *Volksschulen*, which are the predominant type in the country districts.

—George Koeppel, *Elementary School Teacher*, December, 1912.

places of public amusement after 8 P. M. The control of the school authorities in these matters is similar to that of the police.

Subsidiary schools of different types are provided by many cities to make the ordinary schools more efficient. Some cities have established help schools (*Hilfsschulen*), for slow-minded children. These schools have shops for modelling, pasteboard and wood work, as well as exhibition rooms for the pupils' work. The classes are small. These are not schools for the feeble-minded. The feeble-minded are taken care of in special institutions, usually in the country. They correspond rather with our ungraded classes. The *Hilfsschule*, however, is much more thoroughly organized and successful in meeting the problem of the backward child.¹ Mannheim has a system of *forderklassen*, also located in separate buildings. These are designed for children who, through laziness, lack of ability, etc., have failed of promotion. Mannheim has another series of classes for those of special ability, who are given special opportunities for study and advancement.

In Munich, where vocational training has been so wonderfully developed, the last year of the elementary course is designed to steer the boy toward a definite calling and out of the blind-alley occupations. He spends five hours a week for five months in the year in the metal-working shop of the school and the

¹ Koeppel, *Elementary School Teacher*, December, 1912.

same amount of time for the remaining five months in the wood-working shop. Girls in nearly all the classes keep their own kitchen-gardens. Similar special schools are found in other cities.

Education in Germany is highly centralized. Many experts feel that it is too much so. The educational programme emanates from the government rather than from the local authorities, and the people are accustomed to accept it without protest. Despite this fact education commands more consideration and thought on the part of state and municipal authorities than it does in England or America. Doctor Georg Kerschensteiner admits that the German system makes it difficult for local authorities to try experiments and that where too great paternalism prevails old methods are likely to become sanctified by tradition.¹ Yet Kerschensteiner and his wonderful day continuation schools of Munich are in themselves a refutation of this comment, as are the achievements of such cities as Frankfort, Cologne, and Düsseldorf.

Education is under the control of the individual states, as it is in the United States, and within the state the system is much more uniform than it is with us. At the head of it all is a state department, usually the Department of Education. Sometimes there are two executive heads, one for general and one for industrial education. The universities are

¹ *United States Bureau of Education Bulletin*, 1913, No. 24.

immediately under the minister, whose jurisdiction over the schools is exercised through local departments, which represent the government, but differ for different types of schools. Below the minister and the state department are district inspectors, in some respects like our own superintendents, but with this important difference that they are officers of the state. The inspector's authority is much more than supervisory, for he has wide powers over the internal management of the schools. He controls teaching, discipline, and other matters. Under him are inspectors for each community, who serve as chairmen of the local committees. In towns this committee represents the municipal authority. The cost of the local school system is paid chiefly out of local taxes, with subsidies from the state.¹

State control over the schools is also maintained through the regulations governing the training and examination of teachers, who are licensed to teach only after they have passed a state examination. Then they become part of the state civil service. The government determines the courses in the seminaries for the training of teachers and the amount and quality of work to be done by students preparing to teach in the secondary schools. Thus the secondary schools are sure of having highly trained teachers, whether it be in the largest city or in the smallest village. This uniformity of standards, while it de-

¹ Shadwell, *Industrial Efficiency*, vol. II, p. 401.

presses individual initiative and experiment, has the advantage of uniform excellence in preparation.

State regulations similar to the above exist with regard to the university and technical schools, in which we do not find that variation in standard which prevails in this country.

In addition to the standardization of education within the state there is substantial uniformity between the systems of the several states. A state may excel in one branch of education, as does Bavaria in vocational education, but the differences are not fundamental.

The teachers are highly trained. In Prussia there are 129 seminaries for teachers, all but 9 of them for men. The training lasts for six years, although in Prussia only three are spent in the seminary and three in special institutions preparatory to it, maintained by the state or the municipality. After having been admitted to the service, teachers are promoted by competitive examinations or by reason of their recognized achievements. They have the privileges of civil servants, enjoy partial freedom from military service and exemption from municipal taxes, are paid a relatively high salary and have the assurance of a pension on retirement. Thus the position of the teacher is assured so long as he is guilty of no infraction of the laws. As a result of these conditions and the pressure for admission to the state service three-fourths of the teachers in Prussia are male. The majority of the teachers in

this country are female, the distribution in 1901 being 306,063 female and 123,941 male. And the preponderance of the woman teacher is increasing. One of the consequences of this is a great wastage of teachers. Many women marry and drop the profession, while many men enter it as a stepping-stone to something else. The same is true in England. In neither country is teaching a standard profession as it is in Germany, while in neither country is so much attention given to the training and preparation of the teaching staff.

The physical health and well-being of school children is cared for with the same thoroughness that characterizes education. Medical inspection is general. All of the large cities and most of the small towns have school physicians who examine the child on entering school, who call in the parents and advise them of any special dietary or other needs. Accurate records are kept, especially those of backward children. There is an annual congress of the Association for School Hygiene which is attended by school physicians from all over the country and is designed to unify the system of medical inspection.

Strasburg has maintained a municipal dental clinic for school children since 1902, which example has since been followed by Darmstadt, Essen, and other cities. In 1906 Berlin organized a Central Committee for the Dental Care of School Children, which was liberally subsidized by the Prussian government.

Some cities have established open-air schools in the woods, *Waldschulen*, for sickly and anæmic children. To these schools children are sent if they cannot be properly cared for at home and brought up to normal condition. Instruction in these woods schools is given in the forenoon and each period of recitation is followed by a period of active exercise. The number of *Waldschulen* is increased year by year, as are the *walderholungsstätten*, or recreation resorts in the woods, where there is no regular instruction, and the aim is merely improvement in the health of the children. Parents who are able to pay for their children's treatment in these places are expected to do so.

The feeding of needy school children has also made rapid progress. Experiments were made along this line as long as forty years ago. By 1896 the number of cities which had made provision for feeding school children had increased to 79, some of which gave breakfast, some luncheon, and a few both. In 1908 the number had risen to 124 cities of over 20,000 population and to 70 with populations of from 10,000 to 20,000.¹

Physical culture and gymnastics have been developed with great thoroughness during the last two decades. In most schools three hours per week are devoted to physical training, while in Prussia all schools have daily calisthenics which, wherever pos-

¹ Doctor Hinze, *Soziale Kultur und Volkswirtschaft*, p. 302.

sible, are provided out-of-doors. Gymnasium courses for boys provide drills which will later be of use to them when they serve with the colors, such as rapid falling down, rising, etc. The regular physical training is supplemented by long walks in the country, with practice in distant vision, in calculating distances, and the development of the sense of direction, etc. During the spring and summer frequent outings are taken to the woods and places of historic interest. One sees groups of school children daily walking through the country, at the zoological gardens, in the parks, art galleries, and museums. *Schülerwanderungen* is another form of recreation, in which groups of twenty or more boys or girls from the upper grades spend from five to six days on long walking tours with a sympathetic teacher.

The government has done much to encourage local societies for physical culture. These societies arrange for trips to the country, which are encouraged by cheap railway fares and arrangements for sleeping in the barracks and other public institutions. Cities and rural communities provide exercise halls and funds for these societies. Prussia appropriated two and one-half million marks in 1913 to assist in the development of the recreative activities of the schools. Schools are also generously equipped for physical culture. Many of them contain gymnasia, while 72 cities have 500 elementary schools with bathing facilities.

It is difficult to overstate the influence of education upon the life of Germany. And it is almost wholly the product of the last generation. Education is woven into the fibre of the empire. It is not a detached thing, separate and apart. It is an agency for meeting every possible want and anticipating every need. It not only prepares the boy and girl to live, it prepares them to work, and to work in the most efficient way possible. And along with the most minute specialization there is a background of culture and familiarity with cultural things that enables even the poor to enjoy literature, art, and music as well as the beauties of nature. The deadening influence of modern industry with its automatic processes has the counteracting influence of general and special education, so that the variety of training which modern industry has destroyed is supplied through the school and the opportunities for life which the school opens up. Education is also closely integrated with industry through the college, special schools, and vocational training, while a love for the Fatherland, a veneration for the Hohenzollerns, a belief in the destiny of the empire, and a willingness to sacrifice everything for the state are some of the by-products of an educational system which, if not a model that can be copied by other countries, is at least a suggestion of the commanding position which education will probably enjoy in the civilization of the future.

CHAPTER XVII

VOCATIONAL EDUCATION—PREPARING THE CHILD FOR LIFE

COMPREHENSIVE as are the provisions for elementary, secondary, special, technical, and university training, they by no means complete the catalogue of the educational agencies of Germany. It was realized by educators that elementary education did not prepare the boy and the girl for the particular work which they desired to follow; it provided no knowledge of industry, trade, or even the domestic sciences. The continuation school was designed to meet this need. It is another of Germany's contributions to modern education. It is designed for those whose education stops with the elementary school and who are beginning to earn their living, and is based upon the fact that only 8 per cent. of the boys continued their education beyond the lower grades. The continuation schools are designed to reach the other 92 per cent. of the student body.

The continuation school had its origin in a small way in Rhineland and Westphalia. Attendance was at first voluntary. But the schools did not draw many pupils from the trades. Employers and em-

ployees considered it a waste, and the experiment seemed destined to failure. The same thing was true in other towns, even in Munich, where the continuation school had reached its widest and best development. Voluntary continuation schools with Sunday and evening classes were not a success until Doctor Kerschensteiner converted the schools of Munich into a compulsory system obligatory upon all who had left the elementary schools.

The Munich idea is now coming to prevail all over the empire, and compulsory continuation education is accepted by the people as a necessary adjunct to the elementary school. As long ago as 1891 an imperial law opened the way for its extension. This has been followed by subsequent decrees, by which certain local authorities were empowered to establish compulsory schools. Under the existing regulations employers are required to give their employees under eighteen years of age leave of absence from work so that they may attend these schools during the hours prescribed by the authorities. At the present time all of the large towns of Prussia have availed themselves of these powers and have inaugurated continuation schools. Almost all the other states of the empire have followed Prussia's example. And the compulsory feature is enforced. In Hamburg, for instance, employers hiring helpers of from fourteen to seventeen years of age must supply the authorities with their names, and they

as well as the parents and guardians are under obligation to see that the young people attend these schools.

Thus far the compulsory principle has been enforced for the most part in the larger cities. Within the last few years legislation has been enacted extending permissive powers to smaller towns and country districts. Substantial subsidies are granted by the state for the building of these schools. Within a few years' time compulsory continuation education will be universal throughout the empire.

The normal length of attendance required in these schools is six to eight hours per week for three years, the school year being forty weeks long. In Berlin and in many other cities girls must now attend as well as boys. Thirty thousand boys attended compulsory continuation schools in Berlin in 1912 in over 1,000 classes, which included all trades, and 149 classes in commercial branches with 4,416 pupils.¹

The system has grown with great rapidity. A report of the United States Bureau of Education states that—

“In 1910 Prussia had 1,818 industrial continuation schools (*gewerbliche fortbildungsschulen*) with 321,226 students; 59 association schools with 5,831 students; and 285 guild schools, with 11,592 students. Of the industrial continuation schools 1,749 had

¹ Koeppel, *Elementary School Teacher*, February, 1913.

compulsory attendance and 69 had optional attendance. In former years there were many more optional schools, as compared with the proportion to-day, and this proportion is growing. . . . Previously the municipalities received no support from the Prussian state for these continuation schools. Now, however, the state is subsidizing them and conditioning this help upon compulsory attendance, and most of the communities have adopted it. . . . Compulsory attendance stops with the 18th year. . . . Attendance at a recognized guild school relieves the boy from attendance at the public industrial continuation school." ¹

The instruction in these schools, both in the trade subjects and other subjects, is made to fit the needs of the pupil as nearly as possible. In the arithmetic course checks, drafts, and bills of exchange are studied. The bookkeeping instruction is adapted to the trade in which it will be used. In the classes for factory workers only such instruction is given as is considered of value to the permanently dependent worker. There is instruction in industrial regulations relating to apprentices and journeymen (the apprentice system is still holding its own in Germany alongside of the factory system), order and discipline in industrial operations, the hygienic requirements of the workshop, the co-operation and division of labor. Then there is the training for good citizen-

¹ U. S. Bureau of Education Bulletin, 1913, No. 9. See also J. Saxon Mills, in *Fortnightly Review*, vol. 101, January-June, 1914, and Geo. Koeppel, in *Elementary School Teacher*, February, 1913.

ship. The boy is shown the connection of the individual calling with the common life of the family, the workshop, community, state, and empire; and he is taught the genesis and system of important public institutions, reverence for the laws, loyalty to the home and Fatherland, and interest in the affairs of the town and the nation. The pupils learn about the workings of the local municipality and its departments, public hygiene and sanitation, protection and insurance of workers, industrial and district courts, etc., and the most important facts about the constitution, administration of the state, army and navy, and colonies. In the field of physical education there is compulsory study of personal hygiene and elementary physiology and optional athletic training, which is fostered in every possible way—by contests, walking tours, etc. The schools also frequently provide for optional attendance at concerts, lectures, and other forms of educational activities.¹

The needs of the trade and the wishes of employers are considered to the fullest possible extent. If an employer has several apprentices they may be sent to the school on different days in the week, so that he will never be left short-handed. In the seasonal trades, such as those of the carpenters and painters, the work in the school may be diminished in the busy season and correspondingly increased in the off sea-

¹ *U. S. Bureau of Education Bulletin*, 1913, No. 9.

son. These schools can, of course, carry specialization further in the large cities, but even in the smaller towns many varieties of trades are provided for, though allied trades are often united. Thus all the workers in the metal or wood working trade may be united in one class. The Munich system, which is the most highly developed of all, provides classes and equipment for not less than fifty-six trades, and the system is still growing.¹

The United States consul at Magdeburg says of the continuation school:

"One of the aims of the industrial school is to give the youth such instruction in language, government, civic affairs, industrial laws, business customs, trade practices, hygiene, sanitation, etc., as to fit him to be an efficient employer or self-dependent workman, an intelligent citizen, and a capable member of society."²

Moreover, there is nowadays a growing importance attached to journeymen's and masters' certificates, and the continuation school is doing its part in preparing its pupils in these lines.

One important object of the continuation school is to counteract the tendency of modern shops to limit the work of the boy to a few manipulations in a small field of the trade in which he is working,

¹ *U. S. Bureau of Education Bulletin*, 1913, No. 9.

² Ralph C. Benson, U. S. consul in Magdeburg, in *U. S. Bureau of Education Bulletin*, 1913, No. 9.

leaving him helpless and ignorant in regard to all the rest.¹

Magdeburg, with a population of 287,000, is typical of the more progressive of the German cities in the matter of education for commercial and industrial pursuits. After completing the compulsory eight years' schooling, the boy of fourteen who is not going to take up professional studies must choose a trade. The school authorities help him find a suitable apprenticeship. He must go to the continuation school a certain number of hours a week during his apprenticeship, and thus the authorities keep control over his education till the seventeenth year.

The continuation schools are divided into two groups—the trade and the commercial schools, the former giving instruction adapted to the particular trade the pupil is interested in. In 1913 there were classes for bakers, butchers, barbers, waiters, painters, decorators, tailors, blacksmiths, cabinetmakers, and various other trades. Even if the boy does not wish to become a skilled workman and has no ambition beyond being a messenger, street-cleaner, or house servant, the city insists that he shall spend three years at the continuation school. The same regulations hold in Erfurt.

For boys who have been placed in the commercial establishments of Magdeburg there is a requirement

¹ Geo. Koeppel, in *Elementary School Teacher*, March, 1913.

that they shall spend six hours a week for three years in the continuation schools, where their practical education is supplemented by theoretical training. The subjects taught are accounting and bookkeeping, business correspondence, commercial geography, business law, and civil government. Should the boy wish to study still further, he may enter a *Handels-hochschule* for higher education in commercial subjects.

The main continuation school in Barmen, with an attendance of 3,751 pupils in 1913, had 131 classes, divided up as follows:

34 classes for textile trades.

5 classes for lace-making trades.

16 classes for machine-tool making.

3 classes for art forging.

3 classes for plumbing, electric installation, etc.

4 classes for furniture and weaving-loom making.

2 classes for house carpentry.

3 classes for house painting and decorating.

2 classes for shoemaking, saddlery, upholstery, tailoring.

1 class for gardening.

2 classes for typesetting and book printing.

3 classes for bookbinding and box making.

2 classes for lithography and engraving.

4 classes for baking and candy making.

1 class for butchers.

- 1 class for barbers and wigmakers.
- 39 classes for messengers and helpers.
- 2 primary classes.
- 4 classes for weak-minded.¹

The teachers have been specially prepared for teaching their particular branches, and in addition to their daily instruction they give occasional lectures on different subjects. No classes are held after 8 P. M. or on Sundays. All pupils receive four hours instruction each week in trade and civic relations, composition, arithmetic, and bookkeeping. Besides these, pupils in various trades requiring skill in drawing receive additional hours of instruction in this subject. Carpenters, engravers, gardeners, and other trades receive two hours of practical drafting; electricians and machinists, two hours of drafting and one of physics; builders, lithographers, engravers on wood, metal, and stone, four hours of practical drawing; tailors, four hours of drawing, with practical cutting and fitting. For the practical work in the various trades each teacher, who is himself a master, has a complete collection of the materials used, the necessary tools and machines and models of work in his trade.

The cost of tuition is ten marks per year, to be paid by the pupil's employer, and he must also allow

¹ "Reports on Continuation Schools in Prussia," *U. S. Bureau of Education Bulletin*, 1913, No. 9.

the apprentice to attend the school at the proper time.

The American consul at Barmen reports:

"The results are excellent, it is said, and the manufacturers and masters have learned that the instruction well repays the small sacrifice of time and money." ¹

Frankfort-on-the-Main is divided into three districts for purposes of continuation education, and each district has provision for both commercial and industrial education. Courses are free and compulsory for all boys and girls between the ages of fourteen and seventeen who have left school to earn their own living.

The commercial course covers general commercial knowledge (*handelskunde*), commercial arithmetic, bookkeeping, economic geography, citizenship (*bürgerkunde*), commercial correspondence and handwriting for all who show need of such training. Two hundred and forty hours of instruction per year are required.

The industrial division provides technical and economic instruction of a practical but not experimental character in every conceivable handicraft. Classes are conducted by practical experts. Besides the regular trades, such as baking, tailoring,

¹ George Eager, U. S. consul at Barmen, in "Reports on Continuation Schools in Prussia," in *U. S. Bureau of Education Bulletin*, 1913, No. 9.

etc., there is instruction for day-laborers and even for deaf-and-dumb scholars.

An English observer commenting on the continuation school says:

“The classes unquestionably fulfil the magnanimous purpose expressed in the opening sentence of the annual report—‘The object of the compulsory continuation schools is to develop and perfect the vocational equipment of the scholars and to help to build them up into valiant men and citizens.’”¹

Many students of the obligatory age do not attend these schools but go to schools like the splendid Industrial Art School (*Gewerbeschule*), where a small fee is charged and the curriculum is more extended. In the Frankfort obligatory schools alone in 1913 there were 6,901 pupils and 250 classes.

In Munich the continuation-school system reached its earliest and one of its best developments. In that city every boy between the ages of fourteen and eighteen (or seventeen, if his apprenticeship is only for three years) must attend in the daytime some school belonging to the continuation-school system. There are seven of these schools distributed about the city, each housed in a large, well-equipped building. Each has a higher division for journeymen, foremen, and master workmen. Three more such buildings are in course of construction (1914), at a cost of \$500,000. Fifty-six trades have classes

¹ Saxon Mills, in *Fortnightly Review*, January-June, 1914.

in these schools. The following course for brass workers is typical of the Munich schools:¹

	HOURS PER WEEK			
	14-15	15-16	16-17	17-18
Age				
Trade arithmetic, bookkeeping	1	1	1	1
Business composition, essays, and reading	1	1	1	..
Citizenship, sensible living, and hygiene	1	1	1	1
Information about trades, goods, and tools	1	1	..	..
Drawing	3	3	2	3
Practical work .....	..	..	2	3
	7	7	7	8

The first three subjects are invariably taught in all trades, though the actual treatment is adapted to each particular trade. The practical work of the last two years for the brass workers is of a higher grade than the boys are likely to get at their occupation. One must actually see the photographs of the school workshops—even for the chimney-sweeps—to realize how seriously the training is carried out.

The upper division of the Munich industrial continuation schools, which is only obligatory on journeymen and masters, has the following subjects included in its course of study:

Technical Part.—Free-hand and mechanical draw-

¹ R. H. Best, *The Problem of the Continuation School and Its Successful Solution in Germany*.

ing, trade drawing, chemistry, physics, geometry, workshop and laboratory practice, knowledge of goods.

Commercial Economic Courses.—Arithmetic in general, bookkeeping, exchange and commercial law, computation, and business organization.

General Courses.—History of the trade, commercial geography, hygiene, lectures on industry in general, insurance laws, etc.

The most serious complaint heard against the schools is that they tend to make the pupil dissatisfied with the conditions which he finds in the shop in regard to sanitation, etc. Sometimes, too, the school has equipment which the employer lacks.¹

Special advanced divisions of the trade-schools have been developed in many cities. They are either in the same building as the continuation school or are carried on as special schools. They are well equipped with workshops and lecture-rooms, and the classes are taught by teachers who are experts in their trades. Such schools are to be found in Frankfort, Dresden, Leipsic, and many other cities, but it is in Munich that they are most highly developed. The teachers are required by the municipalities to keep up with the latest developments in their occupations, exhibitions, etc., and must know thoroughly the commercial requirements of

¹ Bruno Rauecker, in *Muenchener Volkswirtschaftliche Studien*, 1911, p. 119.

the trade, so that they can teach their subject in a "commercial" way, as opposed to the "school-master" fashion. A fee is required of the students, which in Munich is about \$5 a year.¹

Till recently girls were required to attend only three hours a week in the continuation schools in Munich. Domestic science was the chief subject taught, although the girls were permitted to attend the boys' trade classes, which few of them did. In the fall of 1914, however, continuation schooling became compulsory for girls for the same length of time as for boys. Their schools are divided into three parts: (a) domestic economy; (b) commercial section; (c) technical section. The domestic-economy instruction has just been made compulsory for all servant-girls and untrained workers in factories and girls who stay at home to help in the household after their elementary schooling. Commercial courses are obligatory for all girls in business or shops, and technical courses for those in industries and trades, so far as they are trained workers. The table on page 245 shows the course laid out for the domestic-economy section in the Munich schools.²

Needlework is optional because the girls have learned all there is to know about plain sewing in the elementary schools and the course in needlework in the continuation schools is of a more advanced kind.

¹R. H. Best, *The Problem of the Continuation School and Its Successful Solution in Germany*, p. 40.

²Kerschensteiner, *The Schools and the Nation*.

	HOURS PER WEEK		
	Class 1	Class 2	Class 3
<i>Compulsory subjects:</i>			
Religion.....	1	1	1
Housekeeping and hygiene.....	2	2	2
German.....	2	2	2
Accounts and domestic (later business) bookkeeping.....	1	1	1
The training of children.....	..	..	1
	6	6	7
<i>Voluntary subjects:</i>			
Needlework.....	2	3	4
French.....	3	2	2
English.....	3	2	2
Technical drawing.....	6	6	6
	14	13	14

Educational experts are a unit in their approval of these schools as a preparation for trade and industry. A report of the United States Bureau of Labor says:

"To sum up: 'The German industrial schools are achieving in large measure the purpose for which they were established—industrial efficiency. They are not yet fully developed, nor are their types finally fixed. They constitute a living, growing movement, which gives every promise of increasingly fruitful results on industry and on the comfort and culture of the German people.'"¹

As to the influence of the German educational

¹ Holmes Beckwith, "German Industrial Education and its Lessons for the United States," in *U. S. Bureau of Education Bulletin*, 1913, No. 19.

system on industry the British consul-general for the district of Düsseldorf says:

“German success in commerce and industries is generally admitted to be due to the German government’s exemplary and exceptionally excellent educational system. For the last thirty years the schools and colleges have been turning out young men provided with a better education than can be obtained in the majority of other European countries. Of late years in particular, continuation schools have proved a most valuable asset of the nation. . . . It stands to reason that a nation’s population which has had the benefit of five years’ extra schooling over its neighbor is bound in the long run to forge its way ahead of its neighbor, even if originally both nations were on an equality, mentally and physically. (This writer includes in the five years’ schooling the two years spent in the army—‘that true university of manners and manhood.’) The continuation schools have proved the value of the knowledge they impart to their boys and girls, making them fitter and more able to succeed in the struggle for existence. . . . It is not a question of attending a few evening classes, when the boys are tired out by their hard day’s work; by law the employer is forced to give every boy and girl enough free time during the day to attend eight and sometimes ten hours a week at the school during the working hours. . . . Going as they do from the elementary schools to the continuation schools, and from these into the army, the boys are continuously under some supervision and training, which is so necessary at that age. They are taught, besides their trade, cleanliness, self-respect, discipline, the art of taking care of their health—all of

which is of the utmost value during the whole of their life.”¹

Continuing, the writer says:

“It may in the long run not avail us to maintain a two-ship power against Germany if we allow Germany to maintain a two-school power against us. The more perfect social organization of the German people, their stronger national consciousness, and, above all, their fuller equipment in school and college for the practical duties of life and citizenship—these are more formidable advantages in the secular struggle for survival and supremacy than the mere piling up of mechanical armaments.”²

¹ *British Diplomatic and Consular Reports*, 1913. Cd. 7048, pp. 72-73, quoted by A. Saxon Mills in *Fortnightly Review*, January-June, 1914.

² A. Saxon Mills in *Fortnightly Review*, January-June, 1914. The author had been describing the chaotic condition of continuation education in England, where not more than 13 per cent. of the children who left school at the minimum age continued their education in night school, and of this 13 per cent. only a small fraction attended any length of time. It was a case of tired teachers trying to teach tired pupils.

CHAPTER XVIII

SANITATION AND HEALTH

IN another chapter we have seen that Germany has a high birth-rate and a higher percentage of births over deaths than any other country except Russia. Reference has also been made to the elaborate provisions for the health of children, for their inspection by school physicians, for out-of-door schools and recreation, for the supervision of factories and the introduction of sanitary and hygienic appliances. Public hygiene is a highly perfected profession in Germany. Each city has experts on the subject who enforce stringent sanitary rules, while frequent conferences are held, attended by state and municipal officials. Like education, health is the subject of the most serious official concern. The object aimed at is not only the prevention of disease but the maintenance of the highest possible working efficiency of the individual. Sanitation and preventive medicine in all its branches is another form of the German war on human waste.

A great stimulus was given to the whole subject of public health by the social insurance laws for protection against accident, sickness, invalidity, and old age. If the worker could be kept in health the

demands on the funds would be reduced to that extent. Added to the solicitude for the soldier and the worker was the economic concern of the state and of industry to keep mortality and invalidity as low as possible. And the immense insurance funds accumulated in the hands of the state provided a reservoir for elaborate expenditures for better houses, for the building of sanitariums, hospitals, convalescent homes, tuberculosis farms for the care and recuperation of those weakened by disease. Just as the municipal savings-banks offered resources at a low rate of interest, for the building or purchase of public-service activities, so the moneys gathered together from all over the empire in small contributions from millions of workers made it possible to carry forward an elaborate programme of preventive medicine.

While public health in America is regulated almost exclusively by the local authorities, which make such regulations as they choose, in Germany the empire, the states, and the municipalities all exercise wide supervision of the subject. In addition to the various authorities charged with administrative responsibility an Imperial Board of Health, formed in 1876, serves as a bureau of research and advice for the empire as a whole. The board carries on investigations and places its researches at the disposal of state and local authorities. Such problems as water-supply, disinfection, and the disposal of sewage are

the kind of subjects with which it is primarily concerned.

Health administration, like education, is a matter of state rather than local concern. It falls within the jurisdiction of the Interior Department as in Prussia, or the *kulturministerium*. In this field the state authorities have large powers which they exercise in co-operation with the local authorities.

In Prussia, for instance, the state health department has charge of all measures for the fighting of infectious and certain other diseases. It examines plans for water-supply and sewerage, supervises hospitals of all kinds, and, in general, advises local authorities in matters of sanitation and public health. It also exercises further control over local authorities through the district medical officers, who may vote on local health committees, and even convene them. In Baden, the state authority is responsible for the execution of the sanitary laws, as a police authority. It "administers the state laws and local by-laws and regulations relating to the sale of milk, the inspection and sale of meat, the trade in poisons, the manufacture of mineral waters, the use of beer stills, the businesses of barbers, masseurs, quack doctors, and uncertificated dentists.¹ This wide extension of the police functions in the domain of health administration is typical of other states as well.

¹Dawson, *Municipal Life and Government in Germany*, p. 193.

The local health administration is organized as follows:

In the larger states municipal authorities are required by law to form local committees to co-operate with the state in the administration of the laws. In Prussia such committees must be formed in all communes with more than 5,000 population and may be formed in smaller places. The town council determines the size of the committee. A medical practitioner and building expert are usually among the members. Membership on these committees is honorary and may not ordinarily be declined. The term of office is at least six years. In large towns subcommittees are often formed. The local health committees are required to familiarize themselves with the general sanitary conditions in their districts, particularly in such matters as housing conditions, cleanliness of streets, water-supply, public abattoirs, trade in foodstuffs, conditions of schools, effect of industries of the neighborhood on public health, the condition of the poor and sick and institutions for their care, public baths, cemeteries, etc. It is their duty to support all sanitary measures taken by the police authority, acting in accord with the "circle" medical officer. They must instruct the people upon questions of public health, investigate evils that may cause the spread of disease, and initiate proposals for the improvement of sanitary conditions. Committees are expected to meet

at least four times a year and to make periodic visits of inspection and special visits at times of floods, epidemics, etc. Each city has also its own municipal medical officers. Sometimes the chief of these officers is given a place in the executive, as is the case in Berlin and Charlottenburg. Sometimes his rank is simply that of head of a department dependent upon that body.¹

In the matter of hospitals, cities are required by law to provide only for the care of infectious diseases, and indirectly for the care of the sick poor. Up to twenty-five years ago the hospitals were used only by the indigent sick. Since the passing of the social insurance laws, a great extension of hospital service has taken place. All the larger towns, indeed, go far beyond the legal requirements in the extent and quality of their hospital service. The total number of public hospitals in Germany in 1885 was 1,706; in 1907 it was 2,222, an increase of 30 per cent. Still more significant is the increase in the number of beds, which rose from 75,000 to 138,000 within that period, an increase of 83 per cent., compared with a rise of 42 per cent. in the population. Most of the money paid by the sickness-insurance societies for the treatment of insured persons (\$15,000,000 in 1911) is paid to the public hospitals, which charge the societies less than cost, or a sum varying from 50 cents to 80 cents a day. Wonderful hospitals have

¹ Dawson, *supra*, p. 192.

been erected in recent years. They are equipped with all scientific requirements. The Virchow hospital in Berlin cost \$3,125 per bed for erection and equipment, but most of the others cost considerably less than that. Infectious diseases are usually treated in connection with the general hospitals, but to meet the exigencies of epidemics most of the larger towns have buildings in reserve which can easily be turned into isolation hospitals.

Cemeteries in the big cities are laid out like parks and gardens. They are as free as possible of depressing influences. Charges for grave sites and other services are regulated by law. In Prussia they are limited to actual cost. Many towns, including Düsseldorf, Stuttgart, Frankfort-on-the-Main, and Mannheim, carry on the business of undertaking, and here, too, the charges are low.

The cremation movement is making rapid progress, although it has hitherto met much ecclesiastical opposition. There are (1913) 29 crematories in operation in Prussia and 11 in the other states, nearly all owned by the communes.

Stringent measures for the inspection of food and drink have been adopted by all the states, and inspection is becoming increasingly thorough. The laws are enforced by the sanitary police, with the co-operation of the local authorities. The government of Würtemberg is making special efforts to insure the purity of the milk-supply, and has placed

direct responsibility on the communes supplying the milk. The city of Munich has four groups of food inspectors: (1) market inspectors for all food which comes into the municipal markets; (2) inspectors for all the milk entering the city; (3) 21 district inspectors and assistants for the inspection of the city's food-supply in general, and (4) inspectors for all meat coming from outside the town, who examine at the railway station.

Analytical laboratories for the examination of food have been established in many cities. Berlin has a particularly well-equipped one, which serves for the analysis of industrial material as well as the food-supply, and for chemical and bacteriological investigations in general.

Berlin is also in possession of a splendid system of treating sewage. The city has an irrigation farm of 44,000 acres, planned by the late Rudolf Virchow. About 400,000 cubic yards of sewage from the city and environs is treated daily. Nearly one-half the total area of the sewage farms is devoted to irrigation purposes and 11,600 acres of the remainder consists of corn land, small holdings, and laborers' gardens, dykes, railways, etc. Breslau, Magdeburg, and other cities have similar farms, but of smaller extent. The marked decrease in the mortality from typhoid is largely due to the connection of houses with the sewage system. In 1870 when there were 15,000 properties unconnected with the system in

Berlin, the death-rate from typhoid was 7.7 per 10,000 of the population. By 1900, when all properties in the city were connected with the system, the rate had fallen to 1 in 25,000 and is now even lower.¹

Charges for street scavenging and the removal of house refuse are usually assessed against owners of property and are only rarely met from general revenue. In some towns the local authority provides the necessary vessels and supplies empty, disinfected receptacles for those removed.

Public baths are an institution in nearly all the larger towns, especially those towns situated on rivers like the Rhine and Elbe. "In 1910 there were 335 separate bathing establishments in public hands in 51 towns with a population exceeding 50,000," beside the still greater number of privately owned establishments. Nearly all these towns owned several swimming-baths. In 1913, 72 towns had among them equipped 500 school buildings with baths. The municipal bathing establishments of Munich are among the finest in the empire, although many other cities have establishments on almost as magnificent a scale. The charge at the largest and most sumptuous of the baths in Munich, which was a gift to the city, and is managed by the municipality, is from 3 to 6 cents for the working classes, yet in spite of this low charge it pays its way. Over

¹ Dawson, *supra*, p. 199.

600,000 persons a year use the various baths in Munich. In addition to the ordinary baths some towns have medicinal baths for the benefit of insured persons. On the whole the public baths are a source of loss to the towns, but this fact is not considered by the local authorities because of the more important demands of public health.

Practically all German cities are well provided with parks and open spaces within their administrative area. Barmen, with 12.5 per cent. of its total area in green open spaces, has 20 square yards of green for each inhabitant; Duisburg has 22 square yards and Düsseldorf 24. These are all factory towns. In planning new areas the rule is to reserve a certain proportion of the land for recreative purposes. Besides, there is the forest and woodland belonging to the cities, which is often converted into natural parks.

Up to quite recently, German cities paid little attention to provisions for playgrounds. The ample park space was beautifully kept and carefully guarded from the inroads of youngsters, and this is still the rule in most parks. In recent years, however, parks of a new and more truly recreative type have been provided by many of the larger cities. The Treptow Park in Berlin is an example of this kind. Here adults as well as children may indulge in all sorts of exercise, even bathing and swimming. Gravelled play spaces have been laid out in some

of the older parks and in most of the small neighborhood parks. Cities, once convinced of the necessity for play spaces, have energetically provided them. Recent statistics show that Breslau has 84 public playgrounds for children; Cologne 54; Hamburg 46; Erfurt 39. Berlin has 310 acres of playground space, some of it being levelled ground, some of it grass, besides a number of large playgrounds in the outlying districts to which children are taken on holidays. These resorts were used by over a quarter of a million children in the summer holidays of 1913, nearly half of the children being transported there free. Philanthropic organizations co-operate with the school authorities in equipping these playgrounds with apparatus and with tents for rainy weather and in organizing games.

CHAPTER XIX

THE WAR UPON DISEASE

THE most important advances in health protection have followed the social insurance laws. Statistics showed that 15 per cent. of the claims for disability pensions of males are due to tuberculosis and 9.5 per cent. of those of females. This fact and the powers granted the invalidity-insurance institutions to place invalided workers in a hospital led these institutions to undertake a wide-spread campaign against disease, through the erection and operation of sanatoria, the promotion of better housing projects, and financial assistance to the anti-tuberculosis movement in general. Imperial, state, and municipal authorities co-operated in this campaign.

The most wonderful series of tuberculosis sanatoria have been erected by the insurance institutions, beginning with 1 in 1896, and increasing to 37 in 1909, which provided treatment for 22,734 patients, male and female, during the latter year. A number of other sanatoria have been erected by communal and provincial authorities, largely with funds loaned at low rates of interest by the insurance institutions. The aggregate amount loaned for this purpose up to December, 1909, was 13,062,625 marks, of which

1,252,607 had been repaid. By 1911 there were 99 public tuberculosis sanatoria of both kinds, besides a large number of private sanatoria, some of which provided for wage-earners at reduced rates.

The economic results of institutional treatment in the tuberculosis sanatoria, which averages about 75 days in length, are carefully checked up for a period of five years in the case of each patient discharged with special reference to "restored earning capacity," which in the sense of the invalidity-insurance institutions means that the discharged person is able to earn at least one-third of his wage-earning capacity previous to the disease. In the case of patients discharged in 1905 with their earning capacity restored within the meaning of the insurance laws, 76 per cent. retained their earning capacity till the end of 1905; 63 per cent. to the end of 1906; 54 per cent. to the end of 1907; 48 per cent. to the end of 1908; 44 per cent. to the end of 1909. The proportions for women were somewhat better, being 78 per cent. for the first year and 52 per cent. for the last. The proportion of patients discharged with earning capacity restored grows larger every year. In 1909 it was 83 per cent. for males and females; and 86 per cent., if the cases in which treatment lasted only 14 days or less are omitted from the calculation. Success of the treatment depends largely, of course, upon the stage of the disease when the patient goes to the sanatorium. In 1909, 92

per cent. of those admitted in the first stage of the disease were discharged with earning capacity restored. About 5 out of every 1,000 patients discharged require readmission during the year of discharge, 59 after one year, 68 after two years, 45 after three years, and 33 after four years.¹

The anti-tuberculosis campaign has made great headway in Germany during the last few years. In 1910 the sum of 480,964 marks was expended for aid and support of the general movement, of which almost 300,000 marks was in the form of subventions to tuberculosis dispensaries and information bureaus. There are also sanatoria for tuberculous children (22 in operation in 1911) and 86 preventorium for those likely to become tuberculous, which give treatment free or at very reasonable rates. In addition there are over 100 forest day and night camps and open-air schools. For far advanced cases, 96 homes

¹ The economic results of institutional treatment in the case of employees of the Prussian-Hessian railway system by years, 1904-10 were:

YEARS	NO. OF PATIENTS UNDER FULL TREATMENT	PATIENTS FULLY ABLE TO WORK AFTER					
		1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	6 YEARS
		<i>Per Cent.</i>	<i>Per Cent.</i>	<i>Per Cent.</i>	<i>Per Cent.</i>	<i>Per Cent.</i>	<i>Per Cent.</i>
1904..	716	81.7	74.6	66.6	63.0	59.6	....
1905..	810	85.3	76.7	71.9	68.2	65.2	64.0
1906..	1,180	85.8	78.1	73.0	69.8	69.0	....
1907..	955	81.0	73.0	68.9	65.6	....	....
1908..	1,152	82.6	75.4	75.2	....	....	....
1909..	1,268	86.4	72.3	....	....	....	....
1910..	1,422	85.9	....	....	....	....	....

for incurables were in operation in 1911; also 17 convalescing homes for patients discharged from sanatoria and 33 observation stations, chiefly in connection with sanatoria or general hospitals, for the study of incipient cases. Systematic warfare against the disease is waged by a large number of tuberculosis associations throughout the German Empire, the work being directed and, if necessary, financially helped by the German Central Committee, which is under the protection of the German Emperor, and whose honorary presiding officer is the imperial chancellor. This committee receives a small imperial subsidy of about \$14,000 annually. During the year 1910, the committee expended 177,300 marks in the form of financial aid in the establishment of sanatoria, 33,316 marks for tuberculosis museums, besides the money spent for propaganda, etc.

Largely as a result of the campaign against tuberculosis the death-rate from the disease has progressively declined. For the empire as a whole it dropped from 23.08 per 10,000 during 1895-9 to 18.45 during the period 1905-9. In cities the rate fell from 27.4 during the period 1890-4 to 17.9 in the period 1905-9. The rate in Berlin fell from 34.7 per 10,000 in 1880 to 17.9 in 1909; in Bremen, from 39.7 to 15.1; in Cologne, from 41.4 to 15.6; in Dresden, from 36.9 to 17.7; in Essen, from 40.9 to 10.

The total amount expended for treatment and

care of tuberculous wage-earners in the empire in 1910 in special sanatoria erected for the purpose was about 17,500,000 marks, this being in addition to the sum spent in methods of prevention and the national campaign against tuberculosis, in which insurance institutions have co-operated together with the government authorities of the empire, the states, and municipalities. Only a limited number of those suffering from the disease can be accommodated and given full treatment in the sanatoria, one out of every 13 or 14 at most.

The tuberculosis dispensary has also had a remarkable development in recent years. In 1908 there were only 175 of these institutions, but by 1911 the number had increased to 528. The number of forest day and night camps increased from 82 in 1908 to 98 in 1911. There were in that year 15 forest schools for tuberculous children and 2 agricultural colonies for tuberculous wage-earners. The work of the dispensary is to examine for symptoms of the disease, after which it aims particularly at improving the hygienic conditions of the patient's home. During the four years ending October 1, 1908, the Berlin information bureaus and tuberculosis dispensaries medically examined 82,006 persons for symptoms of the disease. They also examined, reported upon, and put in a more or less sanitary condition the homes of 45,583 tuberculous wage-earners.

A more far-reaching effort is being made to combat tuberculosis by improving housing conditions of the wage-earners—a movement which is being vigorously pushed and liberally supported by the insurance institutions as well as through provincial and communal authorities. Up to December 31, 1910, 320,000,000 marks had been furnished by the invalidity-insurance institutions in the form of loans for building purposes. The government keeps strict watch over the plans of housing projects, in order that speculation may be eliminated and the public good protected.

The invalidity-insurance institutions, comprehending in their membership practically the entire wage-earning population, seek to keep the morbidity-rate, as distinguished from the death-rate, as low as possible. It is these institutions and not the life-insurance companies that have been active in the anti-tuberculosis campaign.

A report of the United States Bureau of Labor comments on the war on tuberculosis as follows:

“The marvellous results achieved in the German Empire through the intelligent co-ordination of public and private agencies enlisted in the effort to reduce the mortality from tuberculosis to a minimum entitles the German experiment, as the first and most successful of its kind, to the admiration of the entire civilized world. Whether what has been done has paid for itself in a strict financial sense is wholly secondary to the social results which have been

achieved, and which have unquestionably conferred an infinite amount of good upon the German people engaged in German industry in successful competition with the economically more advantageously situated wage-earners of many other lands."¹

¹ "Care of Tuberculous Wage Earners in Germany," *Bulletin of the United States Bureau of Labor*, No. 101.

CHAPTER XX

GOVERNING CITIES BY EXPERTS

THE German city is a cross-section of the nation. It is Germany at her best. Here, as in the army, the navy, and the civil service, one finds the most highly organized efficiency and honesty. Corruption is almost unknown. There is no such thing as the spoils system or favoritism. The higher municipal offices are filled with men prepared for the profession of administration by education, long experience, and achievement. The council, too, commands the services of the business and professional classes, who serve without pay and give of their time in an unstinted way to the community.

The city is also a cross-section of the state in its sovereignty. It has large powers and great freedom of action. It controls private property just as it controls persons. It owns many things and operates them in the public interest. There is a solicitous concern for the health, well-being, and happiness of the people, and an intelligent understanding and approval of municipal socialism by all classes that is not to be found any place else in Europe.

Rule by an economic class prevails in the city as

it does in the state. Just as Prussia is governed by the great estate owners, so the city is governed by the large taxpayers, by the business and commercial classes, who, under the three-class system of voting, have a preponderating power at the polls. They elect the members of the city council, who, in turn, select the burgomaster and members of the magistrat. In Prussia the working classes have but few representatives in the council and could not under any circumstances control the administration.

Forty-five years ago there were but few large cities in Germany, and they were capitals of the two score kingdoms, principalities, and free cities. During the intervening years urban population has grown rapidly, possibly more rapidly than in America. This is particularly true in Prussia and along the lower Rhine, where industry has developed with such astounding rapidity.

Düsseldorf had but 70,000 people in 1871. In 1910 it had 356,000. Frankfort-on-the-Main grew from 80,000 to 401,000 during the same period. Berlin was a capital city of but 800,000 in 1870. To-day it contains 2,064,153 people. There are thirty-three cities in Germany whose combined population is over 12,000,000 people. This is 18 per cent. of the whole, while the total urban population equals 49 per cent. of the total. Since 1880 the urban growth has been particularly rapid. Breslau increased in population by 86.9 per cent. in thirty years from 1880

to 1910, Cologne by 253 per cent., Dresden by 248 per cent., Hanover by 146 per cent., Nuremberg by 234.1 per cent., and Chemnitz by 188.1 per cent. During the same period Cincinnati increased in population by 42.8 per cent., Buffalo by 173.4 per cent., New Orleans by 56.9 per cent., Providence by 113.9 per cent., and Rochester by 144.1 per cent. Taking the empire as a whole, urban population increased from about 30 per cent. in 1870 to 49 per cent. in 1910. There are now 47 cities of over 100,000 population, while the total urban population amounts to over 30,000,000.

Fortunately the machinery of administration was admirably suited to meet the problems created by this rapid urban growth. The municipal code has remained but little changed since the reforms of Baron von Stein in 1808. The cities have great freedom of action in matters of local concern. They are almost sovereign in their control over purely domestic matters. Doctor Albert Shaw says:

“There is in the German conception of city government no limit whatever to the municipal functions. It is the business of the municipality to promote in every feasible way its own welfare and the welfare of its citizens.”¹

This idea of municipal autonomy runs back to early times. During the later Middle Ages the towns obtained grants of freedom from the overlords by

¹ *Municipal Government in Continental Europe*, p. 323.

conquest or purchase. Many of the towns in fact were free from all obligations except those to the empire, and some of these free cities like Frankfort, Hamburg, Bremen, and Lübeck retained their freedom down to very recent times. Even to-day Hamburg, Bremen, and Lübeck are free and independent states within the empire.

Freedom is one explanation of the achievements of the German city. It also explains the attitude of officials and citizens. The people have a love and regard for their cities; they desire to serve on the council or voluntary committees. They also bear taxes with unusual willingness and submit to control of the community for the common interest. Back of all other explanations of the German city is its sovereignty, its autonomy, its freedom. It is free to make experiments, which, when successful, are adopted by other communities.

In addition, the administrative machinery is very simple. The municipal code provides for a large council elected by districts, and an administrative group or magistrat presided over by the burgo-master or mayor. In addition to its ordinary activities the city performs many services for the state, such as the control of the church, the supervision of education, the insurance funds, and many other services which in this country and in England are carried on by the state or left in the hands of private individuals.

The town council is a large body; much larger than in the United States. The council of Berlin consists of 144 members, of Charlottenburg 72, of Breslau 102, of Düsseldorf 36, and of Bonn 39. The members are elected from wards for a term of six years. The majority of the members of the council must be house owners.

There are 92 house owners out of 144 members of the council in Berlin, 37 out of 72 in Charlottenburg, and 53 out of 102 in Königsberg. This tends to make the council conservative. In addition the method of election precludes any popular control of the city, just as the constitution of Prussia and the empire preclude any popular control of the state and the nation. This is especially true in Prussia, where the "three-class" system of voting prevails. This excludes the working class from any real participation in the government and, as it works out in practice, lodges the control in from 5 to 10 per cent. of the voters.

In ascertaining the power of the electors, taxpayers are listed according to the amount of income taxes paid by them just as they are for state elections to parliament. The taxpayers are then divided into three classes, each one of which elects one-third of the town council. The classification is made as follows: beginning with the highest single taxpayer, as many are checked off as are necessary to make up one-third of the receipts from the income

tax. This group elects one-third of the council. The process is continued to make up the second class, which elects another third of the council, while the third list, which contains the great majority of the electors, elects the remaining third. For instance, in Berlin, in 1912, out of 386,736 qualified electors, 91.5 per cent. or 353,704 were in the third class, and were permitted to elect but one-third of the council, while 936 were in the first class, and 32,096 in the second class. Between 8 and 9 per cent. of all the electors elected two-thirds of the members of the town council. In the city of Essen, at one time, four individuals made up the first class of voters. The qualifications for the suffrage differ in the different states. In Bavaria a system of proportional representation prevails, while the other southern states have modified their system to some extent in the direction of democracy.

This three-class system of elections is another indication of the caste-like organization of Germany, for just as the empire is governed by the landed aristocracy of Prussia through the constitution of 1871 and the unfair distribution of seats, so the cities are ruled by the big taxpayers, the bankers, landowners, and business men. Neither in the cities nor in the states is there any belief in democracy or any provision for the expression of the popular will.

The town councillor is the only official elected by the people. The mayor or burgomaster is chosen

by the council, as are his assistants who form the magistrat. Together they form the administrative branch of government, and are the centre of the municipal system.

The burgomaster is a distinguished official, the most distinguished in the city. The position is one of great dignity, and is the final goal toward which subordinate officials aspire. Generous salaries are paid, while on the expiration of his term of office the burgomaster receives a substantial pension for the remaining years of his life. In addition he has large powers, and in many cities is a member of the Prussian House of Lords. Berlin and some of the larger cities have an ober-burgomaster and another burgomaster, while Munich has an ober-burgomaster and three other mayors. Most towns, however, have only a single chief executive.

Unlike America and England, the mayors are chosen for long periods, usually for twelve years. On the expiration of their first term they may be re-elected for similar terms, or appointed for life. In Württemberg, the mayor is chosen by the citizens directly, but in all the other states he is chosen by the town council. The selection of the mayor as well as the members of the magistrat must be confirmed by the government in Prussia and Bavaria, although this provision is not found in the other states. In some cities the mayor is nominated directly by the King. Usually the royal assent is

given as a matter of course, but in some instances the crown has rejected the choice of the council, and in Berlin where such rejection occurred, the city was without a burgomaster for some years. If the selection fails to secure the royal sanction the council makes another choice, and if this is not approved the appointment is made by a district president until an acceptable selection is made.

Here, again, is an example of Prussian statecraft, of centralized control combined with local freedom. Under this system the cities must always conform to the will of the King of Prussia. There is no chance for the development of democratic or revolutionary ideas, for the burgomaster and members of the magistrat are the controlling officials of the city. They make the policies of the municipality and carry them into execution. And they are always responsible to the King, who not only approves of their selection, but through this approval controls their advancement as well. In addition the Interior Department supervises the activities of the city. It exercises a centralized veto upon its undertakings. It directs education, controls the police, and is itself responsible for the administration of the property of the church, the insurance funds, and many other activities which are delegated to the city for performance. So long as all goes well there is little interference, for the central authorities are sympathetic to the idea of municipal freedom. And

so long as the executive officials conform to the will of the higher officials there is complete co-operation and encouragement. But should the city select an official who is *persona non grata* to the King, should too radical ideas be fostered, or too new and too advanced socialistic proposals be undertaken, the central authorities would interfere and the city would ultimately be compelled to bow to the royal will.

The powers of the German burgomaster are somewhat similar to those enjoyed by mayors in this country. He presides over the magistrat and directs its proceedings. He also subdivides the work among his associates. He can even intervene when the town council suggests some act outside of its power or in derogation of his position. His power of removal is limited, however, to the right of suspension.

While there are no special qualifications for the office of burgomaster, men are usually selected who have had long training and experience. Usually they have taken a university or technical course with the civil service in view and subsequently have served in a subordinate municipal position from which they have risen to the post of burgomaster in a small town. When a vacancy offers in some other city a number of candidates present themselves. Often men enter municipal service through the town council or the state civil service.

In the larger cities men are selected because of distinguished achievements elsewhere. For instance, Doctor Martin Kirschner was first a judge, later he was elected to the post of town councillor in Breslau. From this he was appointed the city's legal adviser, and in 1893 he was called to become one of the burgomasters of Berlin. Subsequently he was elected chief burgomaster, which position he held until shortly before his death. Doctor George I. Bender, the chief burgomaster of Breslau, also entered the municipal service through the law. He became a magistrat in the city of Thon, and in 1888 was elected burgomaster of that city. In 1891 he was chosen to chief burgomaster of Breslau. Probably the most distinguished municipal official in Germany was Doctor Adickes, of Frankfort-on-the-Main, who entered municipal service as burgomaster of Dortmund at the end of the Franco-Prussian War. Here he served for four years. In 1877 he was chosen burgomaster of Altona, and in 1883 became its chief burgomaster. In 1891 the city of Frankfort-on-the-Main called him to that city as burgomaster, which office he held up to 1913. During this time he raised the administration of that city to a high order of excellence. Under his administration Frankfort became a laboratory of experiments in taxation, in town-planning, in industrial, housing, and harbor developments. When he became burgomaster in 1891 the population of the

city was but 180,000; to-day it is 414,000. Frankfurt suggests a city of 1,000,000 people instead of less than half that number.

Düsseldorf is another example of the same kind of marvellous municipal building under the inspiration of a competent official. In 1898 Doctor Wilhelm Marx, a business man, was called to be its burgomaster. He surrounded himself with other trained men and proceeded to build a city in the centre of the lower Rhine region which would attract business and professional classes from the surrounding territory. Around about Düsseldorf were Cologne, Essen, Barmen, Elberfeld, Duisburg, and many other towns striving for population and commerce. But Düsseldorf became in many ways the experiment station of Germany. With the aid of experts it was planned in a big, comprehensive way to provide for years of growth. All of the public-service corporations were taken over and operated by the city. Docks and harbors were built, the Rhine river front was reclaimed, house and land policies were promoted, and at the end of his term of twelve years the indebtedness of Düsseldorf had been increased to \$100 per capita, although 85 per cent. of this indebtedness was for activities which involved no burden to the taxpayers.

Düsseldorf is known as the Garden City of Germany. It has attracted numerous manufacturers, has lured to itself thousands of retired business and

professional men, and is a great art centre as well as a place of resort for foreign tourists.

This is but typical of the careers of many mayors who have contributed so much to the wonderful cities that have sprung up all over Germany during the last twenty-five years. They have the support of equally competent officials and of the community. Cities compete with one another in various lines of municipal activities, and in this competition the mayor is the directing genius. In miniature his position is not unlike that of a constitutional monarch or the president of a great corporation.

Burgomasters receive high salaries. Berlin pays the chief mayor \$10,000 a year. Frankfort pays \$9,000, Düsseldorf \$8,350, Charlottenburg \$7,600, Breslau and Cologne \$7,500. Other towns of from 100,000 to 300,000 inhabitants pay in the neighborhood of \$5,000 a year. In addition, substantial perquisites attach to the office. In some towns a residence is added. Upon the expiration of the term of office liberal pensions are granted. This is an obligation even where the mayor has proven unsatisfactory, and is not re-elected. The pension usually amounts to from one-quarter to one-half of the salary received.

Associated with the mayor is an administrative staff or magistrat, the members of which are also elected by the council. They enjoy powers analogous to those enjoyed by the directors of the various

departments under the federal or commission form of government in America. Members of the magistrat are selected by the town council, frequently after competition, to which men from all over Germany present themselves. The size of the magistrat is determined by the council and the number of activities in which the city is engaged. Berlin has 34 members, Breslau 29, Charlottenburg 25, Dantzig 25, Düsseldorf 12, and Frankfort 24. These cities are all in Prussia. Dresden has 39 members in the magistrat, Leipsic 37, Mannheim 31, and Munich 37.

Approximately one-half of the members of the magistrat are salaried, the other half serve as honorary advisers. In the smaller towns and in the states outside of Prussia the unsalaried members exceed the salaried ones.

The salaried members are selected with special reference to their fitness for a particular department. One is assigned to be director of law, another of schools, another of finance, another of public works, another of poor relief. Each is trained by education and experience for the place to which he is called. Like the burgomasters, they have generally risen from post to post, and are frequently called from one city to another. The salaries paid are liberal, while an assured position and a pension on retirement add to the attractiveness of the service. The unsalaried members are usually men of distinction and comparative leisure.

A much larger number of administrative chiefs is provided for than in the United States. The salaried directors alone in the average German city are twice as numerous as in the average American city, and including the unsalaried members they are from four to six times as numerous.

Special provision is made for courses in administration in all the universities, while within the last few years a number of colleges have been opened for the special training of officials. Düsseldorf opened a school of administration a few years ago which covers the whole field of municipal activity. Cologne has a similar college, while Berlin has a college of town-planning. The course of instruction includes finance, taxation, police, health, and social activities in general. In some towns training is required as a prerequisite of admission to the municipal service.

This is the administrative machinery of the German city. It is admirably suited to the complex problems of municipal housekeeping. It is designed to secure permanence and efficiency. And the city is viewed not as a political but as a social agency. The former is but incidental. The main purpose is to promote the common welfare in every possible way. And in the carrying out of the idea the state is an aid rather than a hindrance. It encourages new undertakings and suggests projects like housing, land purchase, banking, the building of docks

and harbors, and the promotion of education. Statistics are gathered and successful experiments of one town are made known to another. Conferences are frequently held for the promotion of housing, health, education, and town-planning, attended by experts from all over the empire. Municipal administration in Germany is not the plaything of politics—it is the most serious problem of statecraft, and it commands the best thought of the empire.

CHAPTER XXI

MUNICIPAL SOCIALISM

THE German cities have carried socialization further than have the individual states. They own the greatest variety of undertakings and are constantly extending the boundaries of municipal administration. There is no theoretical distinction between the so-called natural monopolies and competitive industries, although quite obvious principles of action underlie the policies adopted. The public-service utilities, such as street railways, gas, electric light, and water companies which occupy the streets and require special permits or franchises, are generally publicly owned. Harbors and docks are operated as integral parts of the transportation system and as an aid to industry and commerce. Housing is treated as a quasi-public utility, while land ownership and land speculation are engaged in partly for fiscal, partly for social, reasons. Other considerations support public banking, markets, abattoirs, bathing establishments, and restaurants. These are part of a social programme and are sanctioned by the traditions of the country as well as by the long-established policy of protecting the com-

munity from extortion, monopoly, and the dangers which the modern industrial city involves.

The policy of municipal socialism is encouraged by the state, and the laws are adjusted to the easy acquisition and financing of municipal projects. At the same time the high character of men in the councils and the magistracy insure efficiency and honesty of administration. The average German city has at its command more diversified talent and a more highly trained administrative staff, and it carries on its enterprises with greater economy and efficiency than most private corporations.

As stated elsewhere, municipal socialism is encouraged by the great freedom of action which the city enjoys. It can experiment as it wills. There is no inelastic enumeration of powers in the municipal code. Generally speaking, the city can do anything an individual or corporation may do. It is a free and independent entity in the industrial field and enjoys much of the sovereignty of the nation. There are no minute and exasperating constitutional or legal limitations upon its powers, no paralyzing restrictions imposed from above. The city is free to live its own life in its own way, and to promote the well-being of its people as the town council may decide.

Nor are there any constitutional or legal debt limits upon the cities. The city is as free to issue loans as a private corporation. It can borrow to

any extent that it wills and for any purpose, subject only to the approval of the central administrative authorities, which must be satisfied that the undertaking proposed is a reasonably proper one for the city to carry on.

Here again we see the wisdom of German statecraft, a wisdom that is unexpected. For Germany is so autocratic, so fearful of democracy, that we would expect a highly centralized control of the city and a jealous supervision of its life, such as is to be found in France, Great Britain, and America, where a far greater degree of political liberty prevails but where local government is subject to the closest and most exacting control by legislative authorities. But Germany has reversed this policy and has given the cities autonomous powers not only over people but over property. It is because of this fact that German cities have developed as have no cities in the world. They have been free to experiment as they willed or their local necessities suggested.

Cities, too, have long been familiar with the idea of owning things. Villages and towns have possessed common lands from very early times, which are cultivated by the community or leased to its members. Markets were general in mediæval times, as were slaughter-houses, savings-banks, and bakeries. During the early part of the nineteenth century many towns provided themselves with

water and gas, which were supplied not so much for profit as for protection and service.

A revival of communal trading followed the Franco-Prussian War. It was encouraged by the Socialists, but was largely brought about by the business classes. In addition, with the birth of town-planning, it was generally realized that many activities must be owned by the city in order that town widening and improvement projects could be carried through in an orderly way. This was particularly true of transportation, for the old towns were very crowded. Population was congested within the protecting fortifications and when these were removed it was necessary to plan not only the surrounding territory, but to distribute population as widely as possible for the purpose of preventing the recurrence of bad housing conditions. These, too, were years of rapid industrial development, which led cities to build docks and harbors for the encouragement of trade and commerce. These causes, along with the expectation of substantial profits which would relieve taxation, combined to promote industrial undertakings, until to-day the German city has carried municipal socialism further than have any other cities in the world.

Municipal ownership in this country and in England has been limited to the so-called public-service corporations, on the assumption that these indus-

tries differ so radically from competitive pursuits that they alone are a proper subject for municipal activity. There is no such clean-cut distinction in Germany. Each proposal is judged on its merits, on the need and relative advantages of private or public operation. Moreover, when it is decided to take over an existing property that is the end of it. There is no protracted warfare, no exhausting delays, no prolonged litigation. The terms of purchase and of transfer are arranged with the simplicity and decisiveness of an ordinance providing for the condemnation of any other property.

As an indication of the extent to which municipal socialism has been carried, it appears that of 1,279 Prussian towns of all sizes reporting in 1906, 561 owned their water-works, 440 the gas-works, 201 the electric-works, 54 the tramways, 426 the abattoirs and stock-yards, 730 bathing establishments, 38 markets, 19 docks, 42 stone and lime quarries, 17 breweries, 104 inns and restaurants, 45 brick-works, and 23 mills. In addition, individual cities own wine cellars, refrigerating-works, bakeries, dairies, ferries, and other activities.¹ A number of South German cities carry on wine handling, while others have printing-works. Nuremberg owns an orchard and stone-quarries. Almost all cities operate savings-banks and pawn-shops, and many of them either own or co-operate in the building of work-

¹ Dawson, *Municipal Life and Government in Germany*, p. 214.

men's homes. Cities engage in land speculation, while almost all the larger cities own their own theatres, opera-houses, and some of the more progressive ones carry the principle still further and unite their funds with those of private enterprises from which they expect to make a substantial profit. The city of Düsseldorf owns more than half of the stock of an interurban railway which connects a number of smaller towns with Düsseldorf. The company also operates in land speculation.

An even larger proportion of the larger cities own the public-service enterprises. A report made in 1908 of 85 cities of over 50,000 inhabitants shows that 79 own their water-works, 65 their gas-works, 63 the electricity supply, 35 the tramways, and 82 the abattoirs or slaughter-houses, while a large percentage of the cities between 5,000 and 20,000 and between 20,000 and 50,000 own these same activities.¹

In the majority of instances the tramways and gas-works were originally operated by private corporations under grants from the cities. Substantial revenues were and are received for these concessions. In 1910 Berlin received \$1,570,000 in royalties from the private electrical-works. In the same year Königsberg received \$150,000 and Strasburg \$95,000. The privately owned tramways in 28 of the larger cities paid over \$2,000,000 in royalties in 1910. In that year Berlin derived a revenue of

¹ Dawson, *supra*, p. 216.

\$2,500,000 from concessions of all kinds. But private ownership has generally proved to be unsatisfactory and the tendency of municipalities is to acquire possession as rapidly as possible. The tramway undertakings of such cities as Düsseldorf, Frankfurt, and Cologne are among the best equipped of any in the world. The construction work is permanent and durable. The rails are flush with the pavement and the cars are nearly noiseless. The cars, too, are clean and freshly painted. Inside one finds maps of routes, while along the streets are attractive waiting-rooms for the protection of passengers in inclement weather. The rate of fare in most cities is $2\frac{1}{2}$ cents, sometimes with an additional charge for a transfer. In some cities the zone system is followed with a minimum charge of $2\frac{1}{2}$ cents for about $2\frac{1}{2}$ miles, with an additional charge of 1 cent for the maximum ride, even when the line extends out into the country. Cheap season tickets are frequently sold to workmen and school children. In some cities working men's tickets are sold for 12 cents a week for two journeys daily, available during the early morning and in the evening.

Public ownership of the electricity supply is very common. As in England, the municipalities had generally granted concessions to private companies for the gas supply, but when electricity became a commercial product municipal authorities generally

undertook the building and operation of the plants. Within recent years a movement has developed for the erection of large central generating stations owned and operated by a number of local communities, or by communities working with private enterprises. These central plants distribute power and light over a large area. One of the largest of these stations is at Essen, which supplies more than fifty communities and covers an area of 2,300 square miles in its service. The city of Munich owns 51 per cent. of capital in the company organized to obtain electric power from a stream in the Alps, while the balance of the capital is subscribed by individuals.

Nearly all of the cities own their own slaughter-houses. In fact this is an activity carried on by public agencies in almost every country of the world, with the exception of England and America. Connected with the abattoirs are stock-yards to which the farmers bring their cattle for slaughter. Usually all of the meat sold in the city is required to be prepared in the public slaughter-houses, private abattoirs being prohibited. The most elaborate system of inspection is provided, the inspectors being public officials who have taken a special training as veterinary surgeons. The fees for slaughtering are fixed on a basis sufficient to meet the operating costs and interest charges as well as the ultimate repayment of the cost of the structures by means of a sinking fund.

Most of the large towns also own their markets. In the larger cities a series of markets are operated in connection with the central one, to which vegetables and farm products are brought to be disposed of by auction to dealers. In addition there are many open morning markets in the streets which are subsequently cleared for traffic. Market dealers are subject to supervision to see that the food offered is clean and wholesome, and that the charges are reasonable. Regulations are also enacted to control prices for the purpose of preventing monopoly or extortion.

Many towns supply milk as a means of reducing infant mortality. In Berlin the milk provided by the nine children's dispensaries is produced on municipal farms. Dortmund has a municipal dairy, while other towns have co-operative organizations for the supply of pure milk under public regulation.

During the shortage of meat in 1911 and 1912 many cities took steps to reduce the cost of meat and fish. Over two hundred towns entered into contracts for the purchase of foreign meat, which was either sold by the municipality directly or through butchers at stipulated prices. By this means the cost of meat was reduced from 20 to 30 per cent. Similar measures were taken for the purchase and sale of fish and vegetables.¹ By these and other

¹ Dawson, *supra*, p. 246.

means the German city controls the cost of living and insures the quality offered for sale. Waste is reduced to a minimum, as is the chance of monopoly and extortion. In addition the parcel post is widely used by housewives who give standing orders to farmers, who mail meat, poultry, vegetables, and flowers daily from their farms many miles away. This is characteristic of the thoroughness and watchfulness of German municipal life.

Savings-banks have been operated by German cities for centuries. They encourage thrift and supply a financial reservoir for the carrying on of public activities. The savings-banks do a checking business, as do the postal-banks. Over 90 per cent. of the savings in Germany are in public institutions of one kind or another. The banks are managed by an official of the city at practically no cost to the depositors who receive back the full earnings on their money which is invested in public securities, or a limited number of public-utility enterprises of a social character.

Insurance is also provided. Sometimes it is offered by the state, as in Bavaria, but more frequently it is carried on by the city. Berlin, Hamburg, and other towns have fire-insurance societies, while in the country districts groups of communities have organized for mutual insurance against accident liability. Frankfort has insured itself against accidents since 1888, and it is estimated

that from \$45,000 to \$50,000 has been saved during twenty years as a result of this action.

Describing the municipal insurance companies, Mr. W. H. Dawson says:

"The usual method of operations (in municipal fire insurance societies) is for the town to form a company for the purpose, providing all the necessary capital, carrying on the business as an ordinary public enterprise, taking all risks, and receiving all profits. In 1910 the total value of property insured in public insurance enterprises was \$18,905,000,000, of which \$16,785,000,000 represented immovable property. The year's net profits were \$3,350,000 and the accumulated funds stood at \$63,320,000." ¹

Most towns maintain pawn-shops for the relief of the poor in times of distress. These banks charge from 1 to 3 per cent. a month, depending upon the size of the loan and the security offered. They are also used by small tradesmen to carry over unseasonable goods or to otherwise aid them in the transaction of their business.

The municipal savings-banks are of great aid to the cities in carrying out the undertakings in which they are engaged. They finance the housing and land speculation projects, the purchase of public-service corporations, and the like. The total deposits in municipal savings institutions in 55 large towns in 1910 amounted to \$850,000,000. Mort-

¹ Dawson, *supra*, p. 252.

gage banks to aid persons of small means in the purchase of land or the erection of homes are also maintained. Large sums have been set aside for this purpose in recent years. Dresden has made an appropriation of \$21,500,000 for this purpose, Düsseldorf of \$10,000,000, and Aix-la-Chapelle of \$5,000,000.

These mortgage banks make loans on first mortgages up to from 60 per cent. to 75 per cent. of the value of the property at rates of interest ranging from $3\frac{1}{2}$ per cent. to $4\frac{1}{2}$ per cent. Second-mortgage loans are also made, but at a higher rate of interest. In order to take advantage of municipal loans house owners must first join the association and make a deposit of \$125. After a year they are entitled to secure a loan. Investigations made in 1913 by the city of Munich showed that 223 municipal savings-banks had loaned money to the amount of \$775,000,000 on first mortgages at a rate of from $4\frac{1}{2}$ per cent. to $4\frac{3}{4}$ per cent.¹

An estimate was made by the Imperial Ministry of Finance in 1908 of all towns and rural communities with more than 10,000 inhabitants and it was found that the total receipts from undertakings of all kinds—those carried on without special regard for profit as well as those conducted upon strictly commercial principles—amounted in the aggregate to \$126,750,000, or 26 per cent. of all communal re-

¹ Dawson, *supra*, p. 251.

ceipts. Industrial services are generally operated at a profit, sometimes a very substantial profit, although this is not the main motive of operation. The largest contributions to the city treasury came from the gas, electric works, and tramways.

Substantial relief to the taxpayers is one of the gains from these activities.

"The aggregate profits on gas works available in 1910-1911 for the reduction of taxation in seventy-two German towns with 50,000 inhabitants or more, were \$13,018,500. . . . Again net profits available for the reduction of taxes were made on electricity works in 1910-1911 by seventy-two German towns with 50,000 inhabitants or more, having a combined population of 14,116,000 to the amount of \$9,089,500. . . . Taking finally the profits from the tramways available for the relief of local burdens, the amount yielded in 1910 in seventy-four German towns with 50,000 inhabitants or over was \$3,590,000."¹

The total amounts received as profits to be used for the relief of taxation in a number of the larger cities in 1910 were as follows: Berlin, population 2,071,800, gas-works \$1,939,900, water-works \$705,100, and tramways \$42,750; Breslau, population 512,100, gas-works \$659,050, electric-works \$310,500, water-works \$263,200; Cologne, population 516,500, gas-works \$328,650, electric-works \$274,950, water-works \$283,850, and tramways \$292,400, or a total

¹ Dawson, *supra*, p. 217.

of \$1,179,850. Dresden, population 548,300, makes an even better showing. It also owns all of its public-service utilities. The gas-works earned \$782,000, electric-works \$400,250, water-works \$45,650, and tramways \$271,800, or a total of \$1,499,700. Frankfurt-on-the-Main does not own its gas service, but the electric-works yielded \$725,400, the water-works \$170,900, and the tramways \$368,550. Including the royalties from the gas-works, the net receipts from the public-service corporations were \$1,426,300 for the year. Nuremberg, population 333,200, owns all the public utilities, and received (1910) a total contribution for the relief of taxation of \$61,700, while Munich, population 596,500, which also owns all its public utilities, enjoyed a total income from these sources of \$1,110,100. Taking twelve of the larger cities, with a combined population of 7,464,300, it appears that the net profits amounted to \$17,107,300, or an equivalent of \$2.30 per capita.¹

The profits referred to are the net earnings after all payments have been made for interest, depreciation, redemption of capital, and additions to renewals and reserve funds. The profits are also independent of any payments on account of paving and street cleaning and local taxes.

As a consequence of the policy of municipal socialism the indebtedness of the average German city is very high, but as an offset a large part of the

¹ Dawson, *supra*, p. 223.

indebtedness is for undertakings which are self-supporting and involve no burden to taxpayers, whereas the indebtedness of the average American city is for the most part for streets, sewers, parks, schools, playgrounds, and fire and police equipment, which are non-revenue producing. The indebtedness of the German cities is very largely of a profit-making sort.

The following figures of seven Prussian cities for the year 1908 are indicative of the extent to which their indebtedness is for productive undertakings. The "productive undertakings" enumerated include street railway, gas, electric light, water, harbors, baths, etc. The "other purposes" are schools, streets, sewers, and all non-productive undertakings.

TOWN	POPULATION	TOTAL DEBT	FOR PRODUCTIVE UNDERTAKINGS	OTHER PURPOSES
Berlin.....	2,001,032	\$99,254,000	\$64,767,000	\$34,512,000
Elberfeld....	168,090	13,595,000	7,252,000	6,392,600
Halle.....	176,798	9,500,000	2,877,000	4,612,000
Solingen.....	50,961	3,285,000	2,257,000	1,029,000
Magdeburg..	247,358	15,005,000	7,775,000	7,503,900
Remscheid...	69,700	3,930,000	2,790,000	1,147,000
Düsseldorf...	284,439	28,585,000	22,260,000	6,327,000

A similar table of the indebtedness of seven American cities shows the amount as well as the distribution of indebtedness between productive and unproductive agencies.¹

¹ *Financial Statistics of Cities, 1909.* Bureau of the Census.

TOWN	POPULATION 1910	INDEBTEDNESS 1909	FOR PRODUCTIVE PURPOSES	FOR OTHER PURPOSES
Philadelphia..	1,526,383	\$99,355,026	\$30,776,642	\$68,578,384
Cleveland....	538,374	37,304,908	5,613,684	31,691,224
Minneapolis..	294,330	14,927,202	1,933,424	12,993,778
Indianapolis..	228,690	4,790,401	22,000	4,768,401
Denver.....	207,112	5,814,419	329,200	5,485,219
Omaha.....	122,187	8,598,997	.....	.....
Grand Rapids	110,060	3,184,612	1,137,500	2,047,112

Herein is one explanation of the protest against municipal indebtedness in this country. Our indebtedness is "dead" indebtedness. It yields no return. It is a burden to the taxpayers. And it is growing rapidly. The German city, on the other hand, has no fear of indebtedness, for it is usually represented by profit-making properties. It is recognized as good business for the city to go into debt, especially where a financial return may reasonably be expected from the investment, either immediately or in the future.

Nowhere is Germany seen to such good advantage as in the city. All classes have a pride in its life, activities, and achievements; they contribute willingly in taxes for efficient administration and seem to appraise the returns received in education, comfort, and happiness, and to be content with the investment. Business men on the council give unreservedly of their time and treat the trust reposed in them as a high honor worthy of the best service they can render. And for the most part their

actions are disinterested. They have no prejudice against any kind of undertaking if it will improve the city or make it more attractive to business, residents, or tourists. Nor do they hesitate to incur heavy indebtedness for activities which will yield returns either for the relief of taxation or the betterment of the community. The average per-capita indebtedness of cities of over 200,000 people is \$85, a sum far in excess of that of America. Many cities have a much higher debt. Frankfort carries a municipal indebtedness of \$140 per capita, Munich \$125, Düsseldorf \$130, and Charlottenburg \$130. In comparison the per-capita debt of Chicago is but \$43.90, of Cleveland \$69.29, of Detroit \$30.31, of Washington \$44.84, of Milwaukee \$32.47, of Philadelphia \$65.09. In this alone we see one explanation of the difference between the German city and our own. The German city spends generously. Officials treat the city as a business man does his business, and they spend accordingly.

And back of this financial and social policy is a different conception of the city from that which prevails in other countries, and especially that which prevails in America. Our conception of the city is that it is a police agency. It is this and little more. Expenditures and activities are directed to the protection of business and the safeguarding of the individual. We spend generously for our police and fire departments, for streets and sewers,

for schools, and to an increasing extent for parks, playgrounds, and health. But the idea of service is as yet rudimentary. We have consciously refrained from entering the field of profit-making service (except in the case of the water and electricity supply) on the theory that this was not a proper sphere of public activity.

Germany has a far wider vision of the city. The welfare of the community, of all the people, of all business rather than a few businesses, is the standard by which a proposal is measured.

CHAPTER XXII

THE BUILDING OF CITIES

TOWN-PLANNING is another achievement born of the expert and of state socialism. It is a recognition of the permanency of the city, as well as its importance. Town-planning is a recent art. It is scarcely a quarter of a century old. And during these years Germany has produced the most wonderful cities of modern times. This is the more remarkable because these were years of rapid industrial development in which we would have expected business interests to have insisted upon the utmost freedom of action and the necessity for non-interference on the part of the community. Apparently, however, it was a recognition of the dangers incident to uncontrolled development that led to the control of property and its conscious direction by the city authorities in order that the health and well-being of the people should be protected. Here again the German city reflects the far-sighted statesmanship that characterizes the empire; a statesmanship that is responsible for the social legislation, education, and state socialism which are so closely related to the development of the state.

Even the casual traveller remarks on the differ-

ence in city conditions as he enters Germany from Holland, Belgium, France, or Austria. Whether he enters at Cologne, Frankfort, or Munich, or comes by sea to Hamburg or Bremen a new type of city greets the eye. As he leaves the railway station, which is usually one of the most commanding structures in the city, he finds everything clean and well ordered; the streets are paved with the best of material and are kept in splendid repair. There are no disfiguring telegraph wires overhead and few obtrusive signs or bill-boards to offend the eye. There is no smoke or dirt, while a uniform building line indicates the existence of municipal by-laws for the control of buildings. The streets are frequently parked before the houses, which are often ornamented with window-boxes, while at intervals small parks or open spaces are found, beautified with flowers and statuary. Monumental public buildings adorn the city, usually grouped in an intelligent orderly way, while round about the city are great gardens, parks, or woods in which on Sundays or holidays a large percentage of the people may be seen at play. Even the tenements, which are the almost universal form of dwelling, do not suggest the ugly squalor of the English or American town, in spite of the fact that nearly 80 per cent. of the urban population lives amid surroundings that are far from conducive to the health and well-being of the people.

Apparently nothing is left to chance. Everything is under control. The city suggests a conscious directing intelligence that looks out from the Rathhaus as a group of architects might plan a world's fair; as engineers might design a war-ship; as an individual erects a great office-building. Everything suggests intelligence, oversight, and the application of art and science to the city's building.

The German city is planned with all these ends in view. Whereas other countries have left the growth of the city to the unregulated action of individual initiative, Germany has recognized that the civilization of to-day is a city civilization and that the city should be built as a permanent thing. Officials realize that the license of land speculators, builders, and factory owners not only impairs the beauty of the city, but interferes with the comfort and convenience of others as well.

Town-planning had its beginning with the city-widening projects made necessary by the rapid urban growth of a quarter of a century ago, when population broke over the lines of fortifications which surrounded the old towns and began to spread out into the surrounding country. In South Germany and especially along the Rhine, the cities were surrounded with walls and fortifications which congested population within very narrow quarters. In addition many towns like Cologne, Frankfort, Nuremberg, Bremen, and Hamburg had been capital

cities, or rich trading centres with long traditions of municipal pride born of previous independence or notable achievements. The streets were narrow and crooked. They were not suited to modern traffic or the building of street-railway lines. Streets had to be widened, beautiful old buildings were in danger of impairment, fine vistas might be destroyed. About this time, too, sanitary precautions began to be taken to protect the health of the community, while the evils of bad housing began to appear. To meet the needs of a rapidly growing population builders began the erection of tenements differing but little from the overcrowded lodgings of earlier times. Land speculators laid out their property so as to secure the maximum return from its sale with no concern for the comfort, convenience, or well-being of the community. These were the conditions which confronted municipal authorities in the early eighties. Out of these necessities the art of town-planning had its birth.

Town-planning, or *Städtebau*, has now become a recognized art. A number of universities offer courses of study on the subject which attract students preparing for a municipal career. Special courses have been offered in Berlin since 1907. In Saxony a similar department has existed since 1910. In 1912 a college of administration was opened in Düsseldorf with courses on the subject. In 1910 an elaborate town-planning exposition was held in

Berlin, and two years later a similar exposition was held in Düsseldorf. A large literature has appeared upon the subject, while a periodical, *Der Städtebau*, is published.

The attitude of the average town is indicated by the planning announcement of the city of Mannheim, which states that "every town in course of development needs to its extension outward a uniform and comprehensive building plan. If this plan is to offer a foundation for the art of town building it must be drawn up on large lines, must anticipate the needs of a distant future, and pay due regard to the requirements of traffic, hygiene, and taste. The fulfilment of this task constitutes a very important part of all social reform in our towns."¹

This is indicative of the outlook of all city officials and statesmen. Cities like Berlin, Düsseldorf, Strasburg, and Munich have held competitions in which town-planning experts from all over the empire competed. Specifications were first laid down by the authorities which anticipated the future growth of the city for years to come. The specifications were limited to the development of specified territory to be developed, or provided for a plan for the entire city and surrounding territory. Competitors were asked to design the traffic streets, boulevards, parks, and open spaces, so that they

¹ Dawson, *supra*, p. 142.

would fit into the existing city plan. Provision was to be made for steam railways, harbors, and industrial districts, for the location and character of public buildings and schools, as well as hospitals, cemeteries, and other public needs. With these specifications before them, plans were prepared by competitors upon which an award was subsequently made.

In other instances cities employ experts who prepare the city-widening projects in advance of building. When received, the plans are exhibited for public inspection and criticism and when finally approved they become binding not only upon the community but upon private builders and landowners as well.

Underlying all city plans is the proper arrangement of streets. This is the foundation of the city. It is elementary to any city plan. Streets are recognized as being the circulatory system of the city, too important to be left to the narrow commercial interests of private landowners or speculators. And the modern streets in the German city are designed with the greatest care. They are adjusted to the uses to which they are to be put. They are not all alike, each 40 or 60 feet wide and arranged according to the rectangular plan so common in America. An effort is made to design streets for particular needs and uses. Certain streets should be wide, spacious, and park-like. These are the main arteries of traffic. Such streets are frequently from 150 to 200 feet wide. In the centre is a parked

space with gardens to be used for pedestrians. On either side are the street-car tracks, sodded so as to keep down the dirt and the noise. Outside are the traffic thoroughfares. These are the main arteries of circulation. They usually run out from the centre of the city like the spokes of a wheel or form the boulevard system about the circumference of the city. On such streets builders are required to set their houses back a uniform distance from the pavement. Here only detached houses can be built, which must be a certain distance apart and must not exceed a certain height. Less prominent streets are narrower, more cosey and picturesque in their planning. They are intended for residential purposes. Frequently they are crooked; they come to a dead end as in mediæval towns. This is done to discourage traffic. It also lends quiet and charm.

Other districts are dedicated to industrial uses. These sections are not arbitrarily chosen, they are located near the railways, waterways, or harbors. Where possible they are selected with due regard to the prevailing winds on the lee side of the town so that the smoke will be driven from the city rather than across it. These industrial districts are also planned with respect to the uses to which they are put.

Similar ordinances are enacted to control builders with the aim of securing architectural harmony, the proper kind and location of houses, the prevention

of bad housing conditions, and the protection of the whole community from disfigurement. These, with the planning of the streets and the restriction of areas to specified uses, are known as the "zoning system." The city is divided into districts according to its proper use. In each zone there are different limitations as to the amount of land that may be built upon, the amount of open space required, the height of buildings and the distance they must be set back from the street. The building plans also indicate the kind of houses that may be erected, whether villas or apartments. The individual landowner would not think of laying out his property for sale without first consulting the city plans.

The widening plans of the suburban area of the city of Ulm provide that 17 per cent. of the land should first be taken for streets, that 13 per cent. of the lot area should be reserved for back gardens, and 50 per cent. for front gardens. Only 20 per cent. of the lot area may be covered by buildings. The city of Mannheim is divided into three building zones. In the business district 60 per cent. of the land may be covered by structures which must not exceed three stories in height. In the next outer zone 50 per cent. of the lot area may be built upon, while the structures may not exceed four stories in height. In the outlying sections three stories is the limit, while a similar percentage of the land may be built upon.

Cologne provides that only 75 per cent. of the land may be built upon in the business section, 65 per cent. in the next two outer zones, while in the suburban residence district only 50 per cent. may be covered. In the business district of Frankfort 75 per cent. of the land may be covered by buildings which may not exceed five stories or more than 65 feet in height. In the second outer zone buildings may be four stories high, but never higher than the width of the street. For the third suburban zone two stories is the limit.

As a result of these restrictions architectural harmony is insured. There are no sky-scrapers or apartment-houses close beside the detached dwelling. Nor is one owner permitted to build close to the street-line, while his neighbor, more thoughtful of the community, places his house back from the street. All houses are located the same distance from the curb-line, while the sky-line is uniform and rarely exceeds the width of the street. As a consequence the newer sections of the German city present a park-like appearance; they have something of the beauty of the garden cities of England. All of this is sanctioned as a means of protecting property. It insures to the home builder that for years to come his property will be protected from the intrusion of business, tenements, or other objectionable structures.

In planning new territory provision is made for

the needs of the city as a whole. At frequent intervals there are little gardens or play places which are designed in an artistic way. Some of the gardens are sunken, others are just off the street-line so as not to interfere with through traffic. Sites are also reserved for future public buildings, for schools, hospitals, and churches. For these purposes cities acquire land in advance of their needs at very little cost and with adequate provision for the future.

The community is also protected by ordinance from signs and other street disfigurements. Most of the public announcements are placed on kiosks located in prominent places which are either operated by the city or leased out to private individuals. Stations and tram-cars are frequently free from advertisements. The power to legislate against such disfigurement rests in an old law of Prussia which provides that buildings which disfigure the appearance of the city may be prohibited under the police powers of the city. A law enacted in 1907 carried this principle still further and authorized the city to refuse its permission to the erection of any buildings that would unnecessarily disfigure streets and public places, and local authorities are authorized to adopt by-laws for the protection of the architectural appearance of leading streets or ancient historical places. Under these by-laws the erection of bill-boards and signs depends upon police per-

mission, but before permission is granted the opinion of experts or the municipal authorities must be taken.¹

Commenting on these regulations, Mr. Dawson says:

"Many Prussian towns have gone further and have established special municipal offices for advice to builders and architects upon matters of style and taste. No charge is made and there is theoretically no obligation to follow the advice given unless the builder's plans infringe upon the local regulations, yet the good offices of the municipality are both freely used and highly valued. The municipality of Baden-Baden adds rewards to advice, for it gives premiums every year to architects and builders whose erections are adjudged to comply most nearly with certain prescribed conditions as to artistic design and quality of materials, and best harmonize with the general architectural scheme of the town. By the adoption of these and similar common-sense methods, and by insisting that the building, like the planning of the town, should be considered as a whole, it is hoped to prevent the architectural anarchy which has often reigned in the past, and even to rectify many mistakes which have been inherited from times when the building speculator was left to his own devices. The amenity of civic life in Germany is further protected by a law, applying to the whole country, providing that before industrial or trading undertakings which would cause injury or even inconvenience to the neighboring residents can be established, the consent of the higher state authorities must be obtained."²

¹ Dawson, *supra*, p. 154.

² Dawson, *supra*, p. 155.

The same intelligent provision is made for industry and commerce that is made for the residence districts. German cities vie with one another, much as do the cities of America. They compete for factories, for residences, for people. And as an aid in this competition cities make provision for factory sites and transportation. The cities of Mannheim, Bremen, Emden, Frankfort-on-the-Main, and many other towns have purchased large tracts of land to be resold to industries on easy terms. These factory areas are usually selected close by the railways and waterways, and are acquired at farm prices. Thereafter streets are laid out, transportation connections are made, and the property is placed upon the market.

This is part of the comprehensive industrial policy of Germany, a policy that is very common.

"The inquiry made by the Central Office of the Municipal Congress showed that nearly half of the 113 municipal authorities questioned had acquired land for industrial purposes and had systematically offered it to capitalists on advantageous conditions, and that in many cases their land was in communication with the municipal docks. It appeared that in one case the town sold land at half the cost price solely with a view to attracting new industries, while in others mortgages on the land sold were accepted at a low rate of interest."¹

One of the most elaborate undertakings of this kind is that of Frankfort-on-the-Main, a city of 414,-

¹ Dawson, *supra*, p. 241.

000 people. Some years ago 1,180 acres of land on the river Main was purchased at agricultural prices, which has subsequently been developed into a great industrial and factory centre. In connection with the project a great harbor was laid out, the river was deepened, and connections were made with the state-owned railways. The total cost of the undertaking is estimated at \$18,000,000, but the land is now being sold and leased to builders at figures which are expected not only to entirely reimburse the city for the cost of the land, but for the cost of the improvements as well.

New factories are not permitted to go where they will. They are required by law to locate in these new industrial sections. Such orders are not made arbitrarily, however, nor is any injustice done to landowners. Factory sections are chosen by reason of natural advantages; they are close by the railways and waterways, and are supplied with switches, spurs, and sidings which reduce the cost of transportation to a minimum. This is one of the ways by which Germany encourages industry. It stimulates competition, it offers a free play to enterprise by preventing private control of the means of transportation on the one hand and by offering the best of sites at very low cost on the other.

In proximity to the factory districts land is laid out for working men's homes, and here the streets are planned with this object in view. Parks, play-

grounds, and public baths are usually provided in the neighborhood, while the means of transportation are frequently adjusted to the cheap and easy distribution of population.

It is because of such well-ordered plans that the German city is what it is. Individualism and license are controlled in the public interest, while private property is subordinated to the public weal. Present speculative profits are of secondary importance to permanent values. Municipal officials build cities as the naval council erects dreadnaughts, as the minister of war plans his campaigns.

To the convenience of industry and the comfort of the home owner and the tenant is added the pride of the city, a pride expressed in commanding public structures, in imposing water-fronts, beautiful parks and boulevards, and places of recreation. Düsseldorf, a city of 350,000 people, is known as the "Garden City of Germany." It has spent millions on the reclamation of its Rhine water-fronts, in the erection of a great exposition hall in which industrial, art, and municipal exhibits are held, in the acquisition of land and the laying out of public places. Nearly every Rhine city has developed its water-front not only as a means for water and freight traffic but for recreation as well. The embankments upon the river frontage are terraced. At the bottom are landing stages for water craft; on the next level are the railway tracks, while above is a

broad promenade way or park which is used by the whole population. Berlin has parked its canals, which carry the most diversified commerce and has lined them with shade-trees. Dresden stands far above the river Elbe, upon the summits of whose banks great public buildings have been erected.

Munich, Leipsic, Frankfort, and Dresden have expended immense sums in the erection of beautiful town halls, the older ones suggesting the architecture of the Middle Ages and those more recently constructed the modern architecture of Germany. Cities own splendid opera-houses and theatres; many have zoological and palm gardens, while within the last few years cities have erected festival halls which are the favorite places of resort during the summer months.

The exhibition halls and park of Munich cost \$4,250,000, and those of Frankfort \$1,500,000. They are used for industrial expositions, for the display of local art, as well as for music, theatrical performances, and other purposes. The German cities spend generously for beauty and for recreation, more generously than any cities in the world. All this is an expression not only of the affection of the people for their city, but of their patriotism and love of the Fatherland as well.

CHAPTER XXIII

MUNICIPAL LAND OWNERSHIP AND HOUSING PROJECTS

CLOSELY related to town-planning are the land and housing policies adopted by the cities with the sanction of the state governments. During the Middle Ages towns and villages owned considerable tracts of common land. Some of this was within the city limits; much of it was in agricultural and forest land, which was used for the gathering of fuel, grazing, and agricultural purposes. Common ownership of land by public authorities is almost universal in South Germany, some of the towns owning so much land that they are free from local taxes.

In recent years cities have enlarged their landed possessions. They have been instructed to do so by the state authorities and directed to refuse to sell their holdings. The importance of land to planning and housing projects has been fully recognized, as has the possibility of using landed possessions for fiscal purposes.

Orders or decrees have been issued by the central authorities of Prussia and Saxony pointing out

the far-reaching importance of an adequate land policy in the solution of the housing problem, as well as in the control of land speculation, which is recognized as one of the most serious evils in modern city conditions. And as a means of checking speculation and the promotion of adequate housing facilities towns are urged to anticipate their growth and acquire surrounding agricultural land in advance of the city's development. The minister of the interior of Saxony has advised the towns "to increase their estates betimes to the extent of their power, yet to retain all land in their possession, and only to sell where there is a guarantee that no speculation will take place." When sold, public land is usually subject to limitations upon the buyer, who is prevented from speculating on his purchase or transferring the property so acquired to others. In some instances the town reserves the right to buy back the land, while in others the land is merely leased to the occupier.

Many cities have engaged in large land schemes. Among them are Mannheim, Leipsic, Charlottenburg, Breslau, Halle, Frankfort-on-the-Main, Aix-la-Chapelle, Düsseldorf, Duisburg, Essen, Elberfeld, Ulm, and Strasburg. The city of Düsseldorf set aside a fund of \$5,750,000 with which to buy and sell real estate, just as does a private operator. The city frankly stated that one of the purposes of this policy was "to restrain the unnatural augmen-

tation of the price of land." In addition the city owns a majority of the stock in a suburban street railway which is also a large operator in land speculation. By this means it keeps down the price of land for building purposes and at the same time shares in the unearned increment of land values due to the city's growth.

It is quite customary for cities to buy agricultural land for industrial or housing purposes in anticipation of the laying out of streets or transportation lines. When the development has been determined upon the land is systematically planned, the streets are laid out, reservations are made for parks, playgrounds, and sites for public buildings, and the balance of the land is either sold or leased as the policy of the city dictates. Special inducements are made to working men, the land being sold at a low price and on long terms, the money for the building being also loaned either directly from municipal savings-banks or through co-operative societies organized to promote the building of working men's houses. From 75 to 90 per cent. of the cost of the land and buildings is so advanced by the municipality at a rate of interest of from $2\frac{1}{2}$ to 4 per cent., which includes the amortization charges.

Some towns claim that they have completely eliminated land speculation. The ober-burgomaster of Ulm announced at a meeting that that city now

owns four-fifths of the entire municipal area, and that in consequence there is no land speculation. The mayor of Saarbrücken says that in consequence of the land policy of that city the community itself has become a large land speculator.

From reports made in 1910 it appears that cities own from 20 to 80 per cent. of their entire administrative areas, not including roads, streets, and railways. Among these cities Freiburg, in Baden, owns 77.7 per cent. of its area; Stettin 62.5 per cent.; Heidelberg 61.1 per cent.; Coblenz 69.5 per cent.; Augsburg 49 per cent.; Mannheim 48.6 per cent.; and Frankfort-on-the-Main 47.7 per cent.

Berlin owns 5,450 acres within its limits, and 46,899 acres outside of its limits. Frankfort-on-the-Main owns a total of 15,522 acres; Breslau 16,795 acres; Munich 12,792 acres; Strasburg 11,464 acres; and Stettin 15,972 acres. A number of cities own estates several times greater than their administrative areas.¹

During the twenty years from 1890 to 1909 the town of Königsberg increased its estates by 3,000 acres. From 1891 to 1908 Munich added 13,771 acres. In the former city about one-half of the land so acquired was within the municipal boundaries and the other half outside, while in Munich something over one-third of the land acquired was within the city, while two-thirds were outside of it.

¹ Dawson, *supra*, p. 125.

There seems to be no limit to the ambitions of the towns in this direction. Kiel now owns a large part of the land surrounding the city which is let out in small holdings for market gardening, with the result that the town has between 4,000 and 5,000 tenants from whom it receives a substantial income each year. Berlin has been increasing its municipal estates with even greater rapidity and recently purchased a single estate of 15,000 acres at a cost of about \$5,000,000. Part of this land is to be sold or leased for the building of small homes, but the greater part will be used as a public park. The towns of Königsberg and Ulm have recently acquired the fortifications surrounding the city and laid them off as parks or for building purposes.

Much of the land so acquired by the cities is kept as forest land. Of the total of 35,000,000 acres of forests in 1900 the various states owned over 11,000,000 acres, while the towns and communes owned 5,645,000 acres more. One town, Frankfort-on-the-Oder, owns 15,570 acres of forest land; Brandenburg owns 11,220 acres; Stettin 10,570 acres; Frankfort-on-the-Main 8,590 acres; and Wiesbaden 4,750 acres; while many small towns own estates running into the thousands of acres. Most of these forests are operated for profit on scientific principles. They are a direct source of revenue. In other instances the land is divided up for culti-

vation, and in small villages is apportioned among the citizens.

Substantial revenues are realized by the cities from their land holdings. In 1912 Düsseldorf made a profit in excess of \$100,000 from the turnover of its municipal land fund. Magdeburg bought land for \$1,500,000 and sold two-thirds of it for \$6,500,000. The land department of Cologne has made a profit of over \$3,000,000 in thirty years' time from its land transactions. The city of Ulm recently bought 1,280 acres for \$1,500,000, and subsequently sold one-half of it for \$2,000,000, showing a cash profit of \$500,000, and an addition of 860 acres to the landed possessions of the town.¹

The ownership of so large an area of land, frequently equal to one-half of the total area of the city, makes it possible for the community to carry out its building and planning projects in a far-seeing and at the same time economical way. It can direct population in certain directions; streets can be planned in a generous way. Spacious sites can be provided for public buildings, while adequate provision can be made for parks and open spaces. Through the ownership of advantageously located land the city can offer cheap and advantageous sites to factories, planned in such a way as to give the best of railroad and transportation facilities. In addition the ambitious housing plans which the

¹ Dawson, *supra*, pp. 129-134.

German cities have undertaken can be carried out with such restrictions as the city itself sees fit to impose. Moreover, as time goes on the land acquired becomes an asset of very great value to the community. It is claimed that the sewage farms acquired by the city of Berlin have increased so rapidly in value that their sale would enable the city to completely liquidate its total city debt. Undoubtedly the same is true of many other cities. Through sales and leases substantial revenues are derived, which are used to keep down the burden of taxation, while the increasing revenues from forests and agricultural lands are a source of substantial profit. Emphasis is placed by all public authorities upon the necessity of keeping down the exorbitant prices of land speculators, which lead to bad housing, high rents, and overcrowding. The city becomes an active competitor against private landowners and house builders, and in this way serves as a check upon private individuals whose speculative schemes form an obstacle to the development of the towns.

Closely related to the land policies are the ambitious housing projects which have been entered on by most of the larger German cities. No country in the world has approached the housing problem as earnestly and scientifically as has Germany. Officials recognize that private capital has proven inadequate to meet the needs of a rapidly increas-

ing industrial population, and that only through the action of the state itself will proper and adequate housing facilities be afforded. Several official policies have been adopted for the solution of the problem. In the first place all new territory opened up for building is planned by the city far in advance of operations. The streets are designed for the specific uses to which the new territory is to be put, while regulations determine the amount of land that can be covered by buildings, the distance they must be located back from the street, as well as their height above the ground. These regulations apply to private as well as public buildings. Cities have also co-operated in the erection of model dwellings, either by building houses upon municipal land or by the sale of land to building societies formed for this purpose. When land is sold directly to working men easy terms are provided, by which the land is paid for in annual installments, which include not only the interest charges but enough to pay for the whole cost of the house and lot in a certain specified time.¹

¹ For a further survey of the housing projects of German cities, see *Municipal Life and Government in Germany* by W. H. Dawson, chapter VII, and *European Cities at Work* by the author, chapter IX.

CHAPTER XXIV

THE GERMAN CONCEPTION OF THE STATE

GERMANY presents a new conception of the state. It has no counterpart in ancient or modern times. No other people think in the same terms, no other country has a similar psychology, no other nation has so completely subordinated the individual. The Roman Empire in the height of its power is the only state with which Germany can be compared.

“Fatherland” signifies many things to the German; it has many other meanings than patriotic attachment. And all of the activities described in the previous chapters form part of German *Kultur* as the Germans use the term. *Kultur* is not limited to educational and æsthetic things. *Kultur* includes history and traditions, politics, statecraft, and administration; it includes state socialism, social legislation, the conservation of human life, and the promotion of the well-being of the people. All of the individual and collective contributions which Germany has made to the world form part of *Kultur* as the German understands the word. These contributions are colossal. And they are largely social. This emphasis on human welfare is one of the remarkable things about the German idea of the state.

Almost all of the achievements enumerated have been brought about in the short space of a generation. The greatest advance is coincident with the reign of William II. Bismarck laid the foundations of the structure, but his work was horizoned by the conditions of his generation and the unification of the empire. It remained for William II to give unity to the work by harmonizing the landed aristocracy and the commercial classes with humanism in legislation, and by calling to his aid the scientific thought of the nation and identifying with the state the contributions of the universities and technical schools, the scientists and artists, the educators and the business men.

Unity is the predominant note in Germany. The nation thinks and acts as a great human mechanism, adjusted in all of its parts to efficiency and the advancement of the Fatherland. An ambition for imperial power seems to be the conscious motive of the people. No group has been permitted to sacrifice the state in its exclusive control. Each class has accepted sacrifices and limitations on its privileges when the national welfare was at stake.

Legislation has been balanced. Rights have carried corresponding duties, and privileges a corresponding burden. To the old patriotism of war has been added a new patriotism of peace, which has created a public sentiment ready to assume burdens and sacrifices for the common weal. While

legislating for production Germany has legislated for distribution as well. While promoting industry she has promoted the well-being of the people. While training her men to arms she has trained them as artisans, and while granting privileges to the employing class she has required them to share in the burdens of the state, to relinquish profitable fields of investment, and to consider the welfare of the working class.

State socialism in Germany is of two kinds: first, productive socialism, and second, distributive socialism. One means an increase in the amount of wealth produced and the other its juster distribution. Of the two the latter is more important. If we increase the amount of wealth produced, there is more to go around, but this does not necessarily improve the well-being of those who produce, and as a matter of fact, while the general standard of living in most industrial countries has undoubtedly advanced during the past generation, the gain to the great majority of the people is far behind the advance that has been made in production and accumulation. And up to the present time the efforts of lawmakers has been almost exclusively devoted to the promotion of production, to the stimulation of invention, to the encouragement of industry and commerce. The departments of the government, the appropriations made, the kinds of activities carried on have behind them the desire to promote the well-being of the

capitalist and privileged class. Outside of Germany, Denmark, and Switzerland, there has been but little legislation or little official thought to the more generous distribution of the gains of civilization.

In America and England social legislation that looks to fundamental reform is not a matter of primary concern to statesmen. It is but little studied in the universities. It has awakened no philanthropies or endowments for research. There is but little legislation that has for its object economic justice or even fundamental change. We have given protection to domestic industry from foreign competition, we have subsidized the railroads by land grants, we have encouraged agriculture, but in so far as social legislation is concerned our official mind is still in the individualistic stage. Legislation for the promotion of production has proceeded apace, while legislation for the individual man, for the worker, and the great mass of the people has remained in the Adam Smith, Ricardian age. Only within the last few years has there been any sign of change.

Germany differs from other leading countries in the thought that has been given to the distribution as well as the production of wealth. And no other country has so greatly improved the well-being of so large a portion of the people. This is the real explanation of her power; this lies back of her military achievements; this explains her advance in trade, the growth in her overseas commerce, and the rise

of her merchant marine from that of a negligible position to that of the second maritime power of the world.

It is almost impossible to enumerate, much less to translate into our *laissez-faire* consciousness, all of the laws and administrative decrees that have been enacted by the empire, states, and cities during the past generation. Only the main measures stand out in relief. But at every turn in conversation with business men and workers some new measure is discovered that is part of the structure that has made Germany what she is.

Let us first consider the agencies of productive socialism, which are designed primarily for increasing the wealth of the empire. Transportation, which is the circulatory system of the nation, is organized with the most painstaking thought to realize the maximum of service at a low cost. Seaport and river harbors, navigable rivers, streams, and canals have been linked up with the railways and city terminals so as to reduce waste to the minimum. Transportation is an agency of industry and commerce. Profit is only incidental. It has been made easy for men to enter business. Competition has been freed from as many risks as possible. The capitalist is offered good building sites by the cities, closely connected with the means of transportation, and on easy terms. While syndicates have come into existence and are encouraged by the state, they are not permitted to

strangle competition, and new capital is assured an opportunity and is encouraged to enter any field.

Germany has recognized that the division of labor is no longer confined within a single industry. Transportation between the different sections of the empire is almost as important as transportation within the individual establishment. And Germany has adjusted her transportation system, her merchant marine, and her credit agencies as though the state and the outside world were a single industrial organism.

Rapidly increasing population has to be kept at work. Little outlet was offered by the colonies, which have not been a success. And domestic consumption has not kept pace with the growth of the output. A foreign market had to be found. This has been achieved by a systematic study of foreign desires and prejudices, by the adjustment of wares to foreign wishes, by the careful training of clerks and business agents, as well as by the building of steamship lines which run to every available market. The merchant marine as well as the foreign commerce of the country has grown rapidly.

Industrial and commercial processes are a scientific study. Education has been adjusted to changing needs. There are technical universities and technical high schools. In every large city are institutions devoted to training workers in industry, applied art, and manual dexterity. Business is a profession for

which men are specially trained in commercial colleges of high rank. Men not only familiarize themselves with foreign languages, they spend a number of years of early life in England, America, and in colonies, acquainting themselves with manufacturing details and the wants of the most distant markets.

The European war has promoted the process of socialization far beyond what it was a year ago. When the war is over there will undoubtedly be a great increase in state activity; a wide expansion of the services rendered and an accelerated movement toward the socialized state under undemocratic forms. There will be an expansion of public credit at low rates of interest for the rebuilding of the industry and trade of the nation. New industries will be taken over as a means of lightening the burdens of taxation. There will be new partnerships between the state and the syndicates, so arranged as to secure the co-operation of private initiative and at the same time realize a share of syndicate profits. Germany will undoubtedly emerge from the wreckage of the war with greater rapidity than the other nations of Europe by reason of her ownership of so many agencies that lie at the life of the nation and particularly by virtue of her long training in co-operative socialized effort.

Distributive socialism is closely related to productive socialism. By distributive socialism I mean

services performed by the state at low cost or no direct cost at all. In other countries many of these services are either not performed at all or are left to commerce to be exploited. These include the many non-profitable undertakings of the states and cities, the provision for education and health, and the many social services which are supported by taxation. First in the list of such activities are the social insurance schemes which distribute to the community the burdens of sickness, old age, accident, and invalidity. These in themselves have freed millions of men and women from fear of the future, from loss of self-respect, and have kept them as producing members of the community.

Distributive socialism has provided labor exchanges which eliminate much of the waste of unemployment. It has erected working men's hotels or Herbergen in every community, to which the wandering artisan can go. Distress or emergency work provided by the cities relieves the worker during periods of industrial disturbance, just as does the protection of the health of the community by sanitation, by the community doctor, the nurse, the pure-milk stations, and the convalescent homes. Distributive socialism receives the savings of the poor in the municipal savings-bank, and loans the deposits back again at a low rate of interest for the building of working men's homes, the purchase of land, and the maintenance of pawn-shops for the needy. It pro-

vides municipal houses or apartments, or develops garden suburbs.

But distributive socialism does not end with the physical well-being of the working classes, it makes provision for the leisure life of the people as well. Cities maintain opera-houses and theatres in which the best of productions can be heard at a low cost. Through these the cultural standard of the people is elevated. There are municipal art galleries and museums. Cities maintain colleges and academies, they provide lectures and entertainments. Every city of any size has its orchestra or military band which give excellent concerts in the parks and town halls. The leisure life of Germany is under state control just as is education. This is an important function of distributive socialism.

It is by these means that the standard of living of all classes has been improved. Wages have risen, it is true, but the war on poverty, on distress and disease has been waged by the generous use of taxation and the distribution to the poor of a multitude of services which in many other countries are the exclusive enjoyment of the few.

And the cost of these services, which in most countries is shifted onto the poor through indirect customs and excise taxes, is largely borne by those best able to bear it. Taxes bear not only on property but on incomes as well. The rates are progressive, so that the rich and well-to-do pay more than their

proportional share. In some cities the income tax on the very rich for state and municipal purposes rises as high as 10 or 15 per cent. Cities impose an unearned increment tax on the rising value of land, and frankly insist that land values are social in character, and are the result not of the industry of the owner, but of the growth of population and industry. In addition, a large part of the revenues of the empire, the individual states, and cities comes from the many productive undertakings owned by them. Not only have the propertied classes been dispossessed of the most profitable monopolistic undertakings, but tax burdens have been imposed that in America would be considered the most unjust of class legislation.

Property, business, and industry are regulated in the public interest. Factories are required to build where the community decrees. The individual may not lay out his land as suits his fancy or his profit, he must lay it out and sell it for such purposes as the city decides for him. When he erects his home he must abide by the ordinances of the city as to the kind of house he will build, the amount of land it will cover, as well as the height and character of the building. This is but part of the comprehensive system of town-planning that views the city as a unit rather than an accidental group of individual properties. Even banking and credit are largely in public hands. Over 90 per cent. of the individual

deposits are in public institutions while the government owns a controlling interest in the Imperial Bank, and through its ownership supervises and directs the credit transactions of the country.

All this is only a skeleton of the industrial, commercial, and protective agencies that constitute productive and distributive socialism. It does not include the markets and slaughter-houses, the parcel post, the mines and estates, the forests, and the multitude of activities that are owned by the cities. But it suggests the German idea of the state, an idea willingly accepted by all classes. This is state socialism, approved by statesmen, business men, the university, and public opinion generally. It explains the efficiency of the country, not only in peace but in war as well. It also explains the psychology of Germany, and especially of Prussia, where state regimentation has been carried to its greatest development. And within these social regulations a nation of 67,000,000 people moves with a remarkable degree of individual freedom. Instead of stagnation there are initiation and aggression, not only in industry and commerce but in social intercourse as well. For the state draws to its service the most competent men of the country. There is a desire for service, for unremunerated work in the city council, on committees, in connection with chambers of commerce, and semipublic bodies, that affects all classes. And by means of a civil service that weeds out all but the fit,

the most capable men of the universities and of the professions make their way into the service and give their best to the state.

It should not be inferred that there are no faults in the system described. Paternalism and autocracy involve costs of a most serious character. They are political, social, and personal. They are costs to the individual. And as, according to our conception of society, the state exists for the individual rather than the individual for the state, they are costs to the state as well. And the most serious price which the Germans pay for an autocratic state is caste, a caste that runs through the very fibre of the state. Caste is found everywhere. And it is not challenged by the majority of the people. It is assumed that the individual is born to his place in society and that only in exceptional cases may he hope to rise from it. That is, of course, most true of politics which is in the hands of the old privileged classes who consider that they have an almost divine right to rule. It extends even to the cities, where some concessions have been made to representative institutions.

Caste prevails in all social intercourse. Official rank carries an authority and distinction not to be found in any other civilized country. This, too, is part of the bureaucratic idea of the state. It strengthens the ruling caste to identify with itself a large number of people.

Caste rules in education. This is possibly the

most serious criticism that can be made against the educational system of Germany. It affects the universities in which conformity is the open door to advancement. This destroys criticism, it censors the intellectuals, it identifies the entire scientific world with the state, and the state as interpreted by the ruling caste. This is a fault, unhappily, of higher educational institutions in other countries, but nowhere is the intellectual and scientific world so frankly and officially identified with the state as in Germany. The same is true of the church which is a state institution.

Elementary, secondary, and technical education partakes of the same caste system, the same state control. The individual child is educated for the station in life to which he is born. Schools are classified accordingly. The choice once made is in the majority of instances irrevocable. Moreover, all education, elementary, secondary, and higher, is pyramided to a central control. There is state and for the most part imperial uniformity. Localities are not permitted to experiment as they do in America; the local school board is not autonomous as it is with us. The child is moulded by the state, to the state's idea of what is best for the state, and only incidentally what is best for the child. There is uniformity rather than variety, and in consequence that initiative so characteristic of America is almost wholly lacking in the average child.

Prussia has ironed out personal individuality by

the educational system described. She has also ironed out much of the individuality of the states, an individuality that made the Germany of fifty years ago what she was to the world. And this is a terrible loss, as is any system that fails to awaken and keep alive the spontaneity and resourcefulness of the people.

But these sacrifices are not a necessary part of state socialism. The institutions which Germany has developed, and the efficiency that has been achieved are in no way inconsistent with democracy. They are rather the consciously desired ends of the ruling class, which seeks submission rather than protest, and subordination to the state rather than service of the state to the people.

There is nothing democratic in the German idea of the state. The measures enumerated have not been carried through by the Social Democratic party, although it has undoubtedly been indirectly responsible for much of the public opinion that sanctioned them. There was nothing like a referendum to ascertain public opinion. Nowhere in German statecraft is there any belief in democracy or representative institutions or in manhood suffrage. Even in the more Democratic states of the south the suffrage is limited by property qualifications.

State socialism is a natural outgrowth of feudalism. It has its roots far back in German traditions and the experiences of the people. It is the eighteenth-

century state adjusted to twentieth-century conditions. And it has largely made Germany what she is, a menace and a model, a problem to statesmen of other countries, and a pathfinder in social reform.

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